

A comprehensive and coordinated scheme of Statistical Survey for each of the 12 great provinces of the then British India was launched in 1867 as a result of a directive received from the Secretary of State. The work was entrusted to W.W. Hunter, the then Director-General of Statistics to the Government of India. The Statistical Account of the then provinces of Bengal and Assam comprising 59 districts was prepared under his personal supervision.

The Statistical Account of Bengal was published in 20 volumes. Each volume proceeds on a uniform pattern. Starting with a description of geography, general aspects, physical features, etc., of each district, it proceeds to a description of its people, their occupations, ethnical divisions and creeds, their material condition and distribution into town and country. Agriculture follows with very revealing information on land tenures, prices and wages, rates of rent and size of land-holdings, and the natural calamities to which the district is subject. Commerce, means of communication, manufactures, capital and interest, and other industrial aspects form the next item. The working of District Administration is then discussed in great detail—its revenue and expenditure; the statistics of protection to person and property, the police, the jails, and the criminal classes; the statistics of education and of the post office, with notices of any local institution, and the statistics of the Administrative Subdivisions. Each account concludes with information on

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A STATISTICAL ACCOUNT OF BENGAL

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THE CALCUTTA UNIVERSITY, ORDINARY FELLOW OF
THE ROYAL GEOGRAPHICAL SOCIETY, ETC.

VOLUME XV

DISTRICTS OF MONGHYR AND PURNIAH

*This volume has been compiled by C. J. O'DONNELL, M.A., C.S.,
Assistant to the Director-General of Statistics.*

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P R E F A C E

TO VOLUME XV. OF

THE STATISTICAL ACCOUNT OF BENGAL.

THIS Volume treats of the Districts of Monghyr and Purniah, forming the two opposite corners of the Bhágalpur Division.

Monghyr District stretches on both banks of the Ganges, from the table-land of Chutrá Nágpur to nearly half across the alluvial plains of North Behar. The portion of it to the south of the river is broken into two distinct portions by the Kharakpur range. Isolated hills and rocks frequently crop up; and Monghyr town itself stands upon a cliff, overhanging the Ganges. North of the river extends the large Fiscal Division of Pharkiyá, a low-lying and jungle-covered prairie which affords abundant pasture for cattle during the dry months, but in the rainy season becomes a swamp.

The District of Purniah forms a parallelogram between the Ganges and the Nepál *taráí*. The whole western face has been devastated by the changes of the river Kusí, which strives year by year to shift its main channel farther towards the west, and deposits sterile sand over the arable fields. The north-eastern corner runs up irregularly towards Jalpáiguri. As regards its population, as in its local position, Purniah occupies the border land between Behar Proper and

PREFACE

Bengal. The strip along the *taráí* was only added to the Muhammadan Empire in the beginning of the eighteenth century; and the inhabitants still show traces of their descent from the Himálayan tribes. The people of South Monghyr, on the other hand, are connected with the aborigines of Central India.

The total area dealt with in this Volume amounts to 8870 square miles, and contained in 1872 a population of 3,527,581 souls.

W. W. H.

1877.

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INTRODUCTORY NOTE.

WEIGHTS AND MEASURES.

THE local weights and measures are given in detail at pp. 112 and 313-315. In some instances in the following volume, these weights and measures have been converted into their English equivalents, and the native names have not been added. In such cases the reversion from the English equivalents may be effected with sufficient accuracy in accordance with the following tables:—

MONEY.

1 pie ($\frac{1}{12}$ of an ánná) = $\frac{1}{3}$ farthing.

1 pice ($\frac{1}{4}$ of an ánná) = $1\frac{1}{2}$ farthings.

1 ánná ($\frac{1}{8}$ of a rupee) = $1\frac{1}{2}$ pence.

The rupee is worth, according to the rate of exchange, from 1s. 8d. to 2s. ; but for conventional conversions it is taken at 2s.

WEIGHTS.

The unit of weight is the ser (seer), which varies in different Districts from about $1\frac{1}{2}$ lbs. to 2·205 lbs. This latter is the standard ser as fixed by Government, and corresponds to the metrical kilogramme. For local calculations in Lower Bengal, the recognised ser may be taken at 2 lbs. The conversion of Indian into English weights would then be as follows:—

1 chhaták ($\frac{1}{16}$ of a ser) = 2 oz.

1 ser ($\frac{1}{16}$ of a maund) = 2 lbs.

1 man or maund (say) = 82 lbs.

LAND MEASURE.

The unit of land measure is the bighá, which varies from $\frac{1}{2}$ of an acre to almost 1 acre. The Government standard bighá is 14,400 square feet, or say $\frac{1}{2}$ of an acre; and this bighá has been uniformly adopted throughout the following volume.

I shall be grateful for any corrections or suggestions which occur to the reader. They may be addressed to me, at the India Office, Westminster.

STATISTICAL ACCOUNT

OF THE

DISTRICT OF MONGHYR.¹

THE District of Monghyr (Múngír), which forms the western portion of the Bhágálpur Division, is situated between 24° 22' and 25° 49' north latitude, and 85° 40' and 86° 55' east longi-

¹ This Statistical Account has been compiled chiefly from the following materials :—(1) The answers to my five series of questions, signed by the District Officers (1870-71). (2) A variety of special communications, furnished by the Collector, Mr. Lockwood, C.S. (3) A Report on the Kharakpur Irrigation Works by the Superintending Engineer of the Són Circle. (4) Report on the Bengal Census of 1872 by Mr. Beverley, C.S., with subsequent District Compilation by Mr. Magrath, C.S. (5) MS. Statistical Survey by Dr. Buchanan Hamilton (1807-1813). (6) Report by the Collector on the Village Officials of the District (1874). (7) List of Roots, etc., used as food by the lower classes of the people, drawn up by Major Waller, District Superintendent of Police. (8) Opium Statistics, furnished by the Sub-Deputy Opium Agent. (9) Report by the Collector on the Land Tenures of the District, dated December 21, 1874. (10) Report on *Abwids* or Customary Cesses by the Collector, Mr. Barlow, C.S. (1872). (11) Report on the Famine of 1866, by Mr. J. R. Cockerell, C.S. (12) Fortnightly narrative of the progress of the Scarcity in 1874, with special Minutes by Sir R. Temple, K.C.S.I. (13) Statistics of River Traffic, ascertained at the Sáhibganj Registry Station. (14) Statistics of Railway Traffic, furnished by Mr. Carter, local traffic manager of the East India Railway Company. (15) Annual Reports of the Police, Jails, and Educational Departments of the Lower Provinces. (16) Special Jail Statistics, furnished by the Inspector-General for the years 1857-58, 1860-61, and 1870. (17) Postal Statistics, furnished by the Director-General of Post Offices. (18) Parganá Statistics of Bengal, printed by the Board of Revenue. (19) Medical Reports, furnished by successive Civil Surgeons. (20) Annual Meteorological Reports of Bengal. (21) Annual Reports on the Charitable Dispensaries of Pengl. (22) Note on the Geology of the District, furnished by Mr. H. B. Medlicott, of the Geological Department. (23) Information supplied by Professor Blochmann, M.A., and other gentlemen, together with a variety of personal inquiries.

tude. It contains a population of 1,812,986 souls, according to the Census of 1872; and a total area, as returned by the Boundary Commissioner in 1875, of 3922 square miles. The Administrative Headquarters are at Monghyr town, the most populous place in the District, which is situated on the right or southern bank of the river Ganges, in 25° 23' north latitude and 86° 31' east longitude.

BOUNDARIES.—The District of Monghyr is bounded on the north by the Districts of Bhágalpur and Tirhut; on the east by the District of Bhágalpur; on the south by the Santál Parganá and the District of Hazáribágh; and on the west by the Districts of Gayá, Patná, and Tirhut. These limits coincide in no direction with physical boundaries.

JURISDICTIONS.—The existence of Monghyr as a separate executive centre is reckoned to date from the year 1812. It appears from a letter dated the 15th July of that year, that Mr. Ewing was appointed to have charge of the Monghyr criminal court, called the Court of the Joint-Magistracy of Monghyr, which was subordinate to the Magistrate of Bhágalpur, bearing somewhat the relation of a modern Subdivision. The language of the above letter and subsequent correspondence seem to show that the appointment of Mr. Ewing was the first step taken; but I have been unable to trace, in the records of either Bhágalpur or Monghyr, the original orders directing the formation of the new jurisdiction. A letter, also, from Mr. Dowdeswell, Secretary to Government, dated the 22d October 1811, proves that at that time no magisterial authority existed in Monghyr except that of the Magistrate of Bhágalpur, to whom it is addressed. 'I am directed,' it runs, 'to acquaint you that his Excellency the Vice-President in Council considers it of importance that you should revert to the practice which formerly existed, of holding the *kachárá* during a part of the year at Monghyr, and that he desires that you will make the necessary arrangements for that purpose.' The extent of the Monghyr jurisdiction is not mentioned till September 1814, when it is stated to comprise five *thánás* or police divisions,—Monghyr, Tárápur, Sárájarha, Mallahpur; and Gogri. No change seems to have been made in the criminal jurisdiction of the Monghyr court till 1832, when it was determined to erect it into a revenue-receiving centre, under the name of a Deputy-Collectorship, the new office being conferred on the then Joint-Magistrate. This officer, although he did not obtain the title, exercised most of the powers of a full Magistrate-Collector; and from the first corre-

sponded directly with the chief executive and revenue authorities, and not through the Collector of Bhágalpur, whose deputy he at first nominally was. In order to form the new District, *pargands* Sárajgarha, Monghyr, Chándanbhúka, Kajrá, Pharkiyá, Abhaipur, and Gidhaur were transferred from the District of Bhágalpur; *pargands* Amarthu, Roh (in part), Narhát (in part), Maldah, Behar (in part), and Samya (in part), from the District of Behar; and *pargands* Malkí, Baliyá, Masjídpur, Akbarpur-Rání, Bhúsári, Báda-bhúsári, Naipur, Imádpur, Kabkhand, and Utarkhand, from the District of Tirhut. Two years later, in 1834, *pargand* Chakál was transferred from the District of Rámgarh; and in 1839, *pargand* Bisthasári from the District of Patná. Numerous minor changes followed. In 1845, two villages of *pargand* Behar and one village of *pargand* Samya were transferred from the District of Behar to Monghyr. In the following year, eight villages of *pargand* Maldah were transferred from Monghyr to Patná, and twenty-two villages of *pargand* Ghíáspur from Patná to Monghyr. In 1855, seven villages of Báda-bhúsári were transferred from Monghyr to Tirhut; nineteen villages from Behar to Monghyr; and three villages from Patná District, *pargand* Ghíáspur, to Monghyr. The greatest change of frontier between Bhágalpur and Monghyr was effected in June 1874, when *pargands* Sakhrábádí, Darará, Singhol, Kharakpur, Parbatpára, together with *tappís* Lodwah and Simráwan, and 281 villages from *pargands* Sáhrúí and Lakhanpur, comprising in all an area of 613·62 square miles, were transferred to Monghyr from Bhágalpur. Again, in November 1874 and February 1875, 6 villages of *pargand* Chandan Katuríá were also taken from Bhágalpur and annexed to Monghyr.

Since 1832, the magisterial jurisdiction of Monghyr has increased or diminished with that of the Collector. The civil and the higher criminal or assize jurisdiction is still vested in the Judge of Bhágalpur, who, at least once in every two months, visits Monghyr to try sessions cases and inspect the civil courts and jail.

The early history of the District is completely bound up with that of the old Rájput Mu'almán family of Kharakpur. A full account of this family will be found in the description of *pargand* Kharakpur, the most important of that group of *pargands* known as the Mahálát Kharakpur. Other historical information will be given in connection with the towns of Monghyr and Gidhaur and *pargand* Pharkiyá.

PHYSICAL ASPECTS OF THE DISTRICT.—Monghyr District is divided

into two portions, of unequal size and of very different character, by the river Ganges. The northern portion, which is the smaller, is a flat, alluvial plain, very little raised above the ordinary level of the Ganges, and always liable to inundations when that river comes down in flood. It is traversed from north-west to south-east by the Little Gandak, which falls into the Ganges opposite the town of Monghyr. The portion south of the Ganges consists of two plains, separated by a low range of hills running north and south, the chief of which are the Kharakpur hills, which form a very distinct watershed. The river Keul, traversing the Jamúí Subdivision, receives the drainage of the western side of this range, and falls into the Ganges near Súrajgarha. The river Man drains the eastern side, and falls into the Ganges at Bariápur. The District north of the river presents no features of geological interest, and is devoid of scenery. It is quite flat, and for the most part consists of post-tertiary alluvium. It is very fertile, and supports a large population. The south of the District is of remarkable construction, being composed entirely of only the oldest and newest formations. Quartz, mixed in various proportions with mica, may be said to compose the basis of the country. It constitutes the greater portion of the range of hills intersecting the District, and in the south forms conical peaks of no great height. It appears below the Monghyr fort, and as pure granite in the bed of the Ganges at the Beacon Rocks. Hornstone and jasper extend along the eastern face of the hills from Náýagarha on the road to Bhágalpur, and are also met with at Bakam, south-west from Kharakpur. Numerous hot springs are found throughout the whole tract where these metamorphic strata appear. Chlorite appears to form the highest summits of the hills, and is also found to the west of Pahárpur, wedged in between the hornstone and quartz. Nodular iron ore is found in extensive beds in *parganás* Chakál, Parbatpára, and Sahrúí. Laterite overlies the quartz in the neighbourhood of Monghyr. The latter formations are found along the Ganges, extending up to the Monghyr, Darará, and Lakísarál hills, in the form of a rich alluvial deposit; and then, bending round the west of the latter range, spread out southward and eastward over *parganás* Maldah, Bisthazári, Amarthú, and Jamúí.

THE RIVERS of Monghyr are all tributaries or sub-tributaries of the Ganges.

THE GANGES divides the District into two portions, and has a

course within its boundaries of about seventy miles. The first reach is from the point where it touches the District at the south of *parganá* Naipur, nearly opposite the railway station of Barh in the Patná District, to the town of Súrajgarha. This sweep of the river trends to the south-east, is thirty miles long, and has several large islands in its course. From Súrajgarha begins the northerly bend, encircling the high land, which attains its greatest height in the fort of Monghyr. The river is here both wide and deep at all times of the year; and in the rains spreads over the low lands of *parganá* Pharkiyá to a distance of twenty miles from its ordinary bed. From Monghyr it turns almost due south for twelve miles, and then eastward for five miles, to the boundary of Bhágalpur. It is navigable at all times of the year for river steamers and the largest kinds of native boats. The rivers north of the Ganges are formed by the lower reaches of rivers which have their rise and the greater part of their course in the adjoining Districts of Tirhut and Bhágalpur. The principal of these are the following:—

THE LITTLE GANDAK enters the District between *parganá*s Bhúsári and Naipur, and after a tortuous course, which is generally parallel to the Ganges, through *parganá*s Bhúsári, Paliyá, and Pharkiyá, falls into the Ganges at Gogri, six miles north-east of Monghyr. It is navigable throughout the whole year for boats of four tons, and in the rains for boats of seventy tons burden. It is the most important trade route in the north of the District, and is connected by several large *kháls* or channels with the Tiljuga.

THE TILJUGA passes through the centre of the great *parganá* of Pharkiyá. It is properly a Bhágalpur river, and is navigable for the same kind of boats as the Little Gandak.

The other water communications of the north of the District are *kháls* or connecting channels, which are available only in the rains. By keeping to them, boats of twenty tons burden can get within a short distance of any place in the great inundated tract extending from Tilkeswar to the eastern boundary of the District, about thirty-two miles in length and fourteen miles in width. The most important of these are the Khargariá, Bághmatí, and Chandá *kháls*.

None of the rivers of the south of the District, except part of the Keul, are navigable at any time of the year,—in the dry weather for want of water, and in the rains on account of their rapidity and uncertainty of flood. In the spring and summer, it is only near their sources that they contain any visible stream; and then each of the

numerous small branches holds a greater quantity of water than the large channel, worn by the united force of these torrents when swollen by the periodical rains. The widest channels, indeed, appear perfectly dry sand ; but by digging a foot or two deep, good water may at all times be procured. It is evident that this subterraneous water has in some cases a current. Canals dug obliquely across the bed collect a small stream, which may be conveyed to some distance for the purposes of irrigation.

The principal of these streams is the KEUL, which rises at Karak-diha in Hazáribágh, and, running north-eastwards through *parganá* Gidhaur, passes under the subdivisional town of Jamúf. Opposite the old castle of Gidhaur it is joined by the Maura, which rises in the Mallahpur hills. The united streams form a channel four hundred yards wide, which is, however, filled only a few times during the year, after heavy rainfalls. Two miles below this point it receives the Uláyí, a fine river, which even in March has a considerable stream. Seven or eight miles below this junction, the Keul receives the Anjáná, the nymph of which gave birth to Hanumán, the king of monkeys, the offspring of an amour with the wind-god Pávan. The Keul is joined by the Halahár twenty miles above the point where it falls into the Ganges at Súrajgarha. Throughout this final portion of its course, below the confluence of the Halahár, it is usually navigable during the rains for boats of fifteen tons burden.

THE MAN rises in *parganá* Wasila, receives accessions from the warm spring of Mahádeo hill, and flows nearly due north through *parganás* Sahrúl and Kharakpur to the Ganges, into which it falls just at the boundary between Monghyr and Bhágalpur. The other rivers on the west of the Kharakpur hills are the Naktí, formed from the Kathrá and Mata, the Bághdhar, the Kasái, and the Báruyá.

THE CHANGES IN THE RIVER COURSES have been almost confined to the Ganges, the main channel of which has several times changed to north or south of the several islands that lie in the bed of the river west of Monghyr. At present it passes directly under the fort ; and a great piece of land, called the Bindá *didrá*, with an area of twenty-two square miles, has been formed in the south of *parganá* Pharkiyá. The changes in the Little Gandak and Tiljágá have been unimportant, consisting of the cutting off of a sharp bend, or the forming of a new one through low ground.

THE BANKS of the rivers in the north of Monghyr are either abrupt or sloping, according to the varying incidence of the cur-

rent. The Little Gandak has generally abrupt banks, and the Tiljugá sloping ones, the difference being due to the unequal force of their currents. The greater number of the southern rivers, such as the Keul and Man, have steep banks.

THE BOAT ROUTES are up and down the Ganges, the Little Gandak, the Tiljugá, and the *khdls* which unite the two latter. The boats used are like those of the neighbouring Districts—*palwars* up to eighty tons burden, *pansis*, *sorindás*, *kusis*, *ektas*, *patilds*, *katurds*, and *malnis*, besides *bajras* and *bhaulids*.

THE LOSS OF LIFE BY DROWNING, as reported to the police in the year 1870, in the whole District was 193; in 1871, 247; in 1872, 268; in 1873, 207; in 1874, 311. The greatest number of deaths from this cause were in the northern police divisions of Gogri, Tegrá, and Begu Sarál, and in Shaikhpurá, south of the Ganges.

LAKES AND MARSHES.—The country north of the Ganges abounds in marshes, several hundred being enumerated in the single *pargana* of Pharkiyá. Their formation is generally peculiar, the banks, which are covered with wild roses and the lantana bush, being high and abrupt, which would seem to show that they owe their origin to the diversions of great rivers. It is probable that the Ganges at one time made a bend ten miles north of its present bed, through this Fiscal Division. They are filled annually by the floods of the Ganges or Gandak, and during the rains abound with alligators, or, more strictly speaking, snub-nosed crocodiles. They are also full of fish, and form the chief source of the Monghyr fish supply. All along the north of the District there is a chain of marshes, the principal of which is the great Kábar lake. Rice is sown on the edges of the shallow marshes. The deeper ones are frequented during the cold season by myriads of wild-fowl, geese, ducks, and ibis. South of the Ganges, permanent marshes are of insignificant size; but considerable tracts of country are flooded in the rains, particularly to the east of the Jamálpur and Kharakpur hills.

IRRIGATION is practised all over the District, particularly in the portion south of the Ganges. In low rice-growing country it is unnecessary; but on the higher lands, suited for *sáthi* rice, artificial watering is common, when the rains are late and it is important to get the crop sown. This is often rendered easy by floods in the Ganges, due to up-country rain. The contrivances used for raising the water are very simple, and generally inexpensive. If the water level is not more than two feet below that of the field to be irrigated, the *siuni*

is used. This is formed from a piece of very closely woven bamboo matting, about eighteen inches to two feet square, two of whose adjacent corners are brought together, and the touching edge sewn up, so as to produce an article like a flat, shallow coal-scuttle. Two ropes are attached to the wedge-shaped end thus formed, and one to each of the remaining corners. It is worked by two men, each holding one of the end and one of the corner ropes, who plunge it into the water, and, bringing it up full, discharge it into the field by a quick raising of the end ropes. Another contrivance is called the *lâtkurt*, which corresponds to the *dongé* of the south-western Districts. It is usually made of the hollowed trunk of a *tdl* tree, and is worked by one man, who stands on one end in order to depress it into the water. He has merely to withdraw his weight, when a simple lever tilts the trunk up and discharges the water through the other end, which rests on the edge of the field. A system of three or four *lâtkurts* may be used for lifting water from a deep tank. The *jant* is an irrigator worked in precisely the same way as the last, except that, as a large hemispherical vessel of iron or baked earth is substituted for the *tdl* trunk, the man working it has the extra labour of landing it on the edge of the field and then emptying it in. On the high lands in the south, where opium and sugar-cane are grown, most of the irrigation is effected from wells, and is a very expensive process. The contrivance employed is called a *mot*, and requires two men and two oxen to work it. It consists of a large leather bag, which is kept open by a circular rim of iron. It is lowered into the well by means of a stout rope passing over a pulley supported on uprights. To the other end of the rope two bullocks are yoked, who raise the water by walking away from the well. One man attends on and drives the bullocks, whilst the other lands and empties the *mot*.

THE KHARAKPUR IRRIGATION WORKS.—The most important works for the purposes of irrigation are those now (1875) in course of erection on the Kharakpur estate of the Mahārājā of Darbhanga. This fine property, like the other estates of the family in Behar, has been for some years under the management of the Court of Wards, and has had the advantage of skilled European supervision. One of the most valuable results of this management is the irrigation scheme described below, which has now very nearly approached completion.

About two miles south of the town of Kharakpur, the river Man

runs through a gorge between two steep hills. This river has its source in the perennial hot springs of Bhimbāndh, and is never dry. Its bed is formed of sand and shingle, more or less bound together by alluvial silt. This layer is from eight to sixteen feet thick, and overlies a stratum of the stiffest clay, of varying depth; which is again supported on the quartzite and jasper rock, which constitutes the predominant formation of the surrounding country. Just at the narrowest point of the gorge, this rock crops out across the river bed, and has been taken advantage of to form a natural foundation on which to raise a great dam. To the south the gorge widens out into a valley, hemmed in on all sides by low but abrupt hills. This valley will be the future reservoir.

In April 1870, sanction was obtained from Government for the expenditure of £24,990 on irrigation works. Contracts were completed, and the contractors received authority to begin work in about two months afterwards, but by that time the working season had very nearly passed away. In fact, little was done till the following October beyond the collection of labourers and materials. Here, also, a fresh difficulty presented itself. The chord line of the East India Railway was in course of construction through the western parts of the District, and had absorbed the greater part of the local labour supply, by offering higher rates of wages than the Kharakpur contractors were willing to give. The labourers were constantly absconding,—as soon as, according to the custom of the country, they received an advance. The working season of 1870-71 went by with little done, most of the time being spent by the engineers in repeated representations that higher rates, which were ultimately granted, were absolutely necessary. A good deal of work was done in the cold weather of 1871-72; £9185 was expended, and it was hoped that the works would be completed by the end of 1873. However, as they progressed, it was found that the amount originally sanctioned would do little more than complete the main dam and the reservoir, whilst a large extra sum would be required for distributaries. New estimates were drawn up, and £69,257 was ultimately granted for the whole works, £19,493 of which was allotted to the main dam, and £49,764 to canals and minor distributaries.

The following description of the works is derived from a report by the Superintending Engineer of the Són circle, and represents their condition at the beginning of the rainy season of 1875. They had then been completed, except for a narrow passage in the main

dam through which the river flows. This great mass of earthwork is eighty-one feet high, measured from the river bed; twenty-seven feet wide on the top, with sides sloping one foot in three. The extreme length on the top, from hillside to hillside, is seven hundred feet. It is composed throughout of homogeneous red clay rammed in thin layers, and is traversed in the centre by a rubble stone masonry wall, three feet thick at the top and ten feet wide at the base, spread out by footings to twenty-six feet in the foundation which rests on the solid clay. The front of the slope is protected by a layer of rubble stone about one foot thick, which it has been proposed to bind together with mortar, in order to prevent animals from burrowing into it. The waste weir has been cut out on the south side from the rock, the greatest depth of cutting being forty feet. It is one hundred feet long and three hundred and forty wide on the crest. The rock is solid quartz, and can never be in any way affected by the action of the water. The hill at this point slopes rapidly on both faces, and there is a deep ravine on the outer side communicating with the river, by which the water will be carried off. The crest of the overflow weir is twenty feet below the top of the dam, and twenty-three feet above the sills of the outlet irrigation sluices. The northern outlet is cut through clay and rock, on the latter of which the sluices are founded. The southern outlet is through stiff clay in a thirty feet cutting. All these sluices have a cut stone floor and rubble stone apron, extending for two hundred feet. The walls are faced with cut stone, and pierced in the case of the northern outlet with three vents of four feet by three feet, and in the southern outlets with four vents of the same size. They are fitted with iron frames and gates, worked from above by powerful screw gearing. Besides the waste weir, some waste sluices of similar construction are provided, in order to return to the Man river below a certain proportion of the water, for reasons to be afterwards mentioned.

The shingly bed of the river for some time gave trouble, as its porous nature caused fear of percolation, which might result in the entire destruction of the dam. At first, five wells, of eleven feet in diameter and one and a half feet apart, were sunk in the line of the wall, through the shingle bed and the sub-lying clay, down to the rock. It was afterwards resolved to remove entirely the shingle bed, and the following arrangement was adopted. A coffer dam of thick teak planks, in double rows six feet apart, was driven down through

the clay and filled with puddle, the whole way across the river, thirteen feet from the line of the traversing wall on the up-stream side. The intermediate shingle between the wall and the coffer dam was then removed, and the space filled with concrete. Another similar dam was constructed in the line of the foot of the inner slope, two hundred and fifty feet from the wall, the whole of the loose material being again cleared out down to the solid clay and rock. A portable engine and a Guynnes' pump were employed to keep the pit free of water. The whole of the work has been very neatly and well executed, the side slopes being carefully dressed and turfed, masonry drains provided for carrying off rain water from the slopes and roads, and the whole protected by neat wire fencing. A sudden freshet in the river in May 1875 carried back into the excavation some of the shingle which had been removed, but beyond causing a temporary delay, no damage was done; the extra cost entailed by this little accident was about £80. Some of the distributaries have been completed, and their falls tested with the full volumes of water they will eventually have to carry. At the present time (October 1875) the works are being pressed on, and the engineers hope to complete them, by filling in the gap in the main dam, before the rains of 1876. The Deputy-Commissioner of Wards' Estates in the Patná Division informs me that by the end of August 1875, £10,794 had been expended on the main dam, and £41,615 on the canals and distributaries.

The following figures, given in a report by the Superintending Engineer of the Darbhanga Ráj to the Commissioner of Patná, show the financial results that are expected to be obtained, and also estimates of the volume of water to be impounded, and to be passed by the waste weir :—

The lands to be irrigated by the scheme amount to 26,240 standard *bighds*. The whole of this area is suitable for the cultivation of fine rice, and at present yields a rental of £2322, 16s. 9d., on an average assessment of R. 0. 14. 2 or 1s. 9½d. per *bighd*. It is calculated that, with the aid of irrigation, it will bear an average rental of Rs. 3 or 6s. per *bighd*, or a total rental of £7872 per annum,—an increase of £5549, 3s. 3½d. on the present rental. The revised estimate of the total cost of the undertaking amounts to £69,337, 10s. 7½d.; so that the return will be eight per cent. on the expenditure. In addition, it is hoped that irrigation will in the future prevent those periodical losses of revenue due to failure of crops, which hitherto have occurred nearly quinquennially.

The area of the catchment basin is thirty-six square miles, and the greatest rainfall registered during the last seven years was 59·42 inches. The largest discharge ascertained by river gauge during the same period was 11,067 cubic feet per second, and the greatest discharge of the basin is calculated to be 19,278 cubic feet per second. The crest of the main dam is forty-three feet, and the crest of the waste weir twenty-three feet, above the sills of the sluices; and the area of the reservoir at the level of the sills is 1·7 square miles, calculated from a survey and a contour section of the basin. The capacity of the reservoir storage between the sills of the sluices and the crest of the waste weir is, therefore, 1,090,045,440 cubic feet, which represents the amount of water to be impounded in one year for the purpose of irrigation. Assuming a 60 inches rainfall, the total catchment of the basin will be 4,516,300,800 cubic feet; that is, the sluices and waste weir must be able, if required, to discharge 3426 millions of cubic feet. These figures are thus fixed in consequence of an agreement between the Darbhanga Court of Wards and Rájá Lilánand Sinh, who owns the riparian land farther down the river, that not more than one-third of the average amount of water due to rainfall should be impounded. The means provided are amply sufficient to do this: the sluices, seven in number, four on the southern and three on the northern side of the river, are four feet by three, with a head of twenty-one feet. When the water in the reservoir is level with the crest of the waste weir, they can discharge 1890 cubic feet per second, *i.e.* 163,296,000 cubic feet per diem, or the year's surplus rainfall over the storage in twenty-one days. Independently of the sluices, the waste weir, one hundred feet in length, has its crest twenty feet below the crest of the main dam, and, with a head of 9·8 feet, would dispose of the greatest discharge ever registered in excess of storage,—that is, 3426 millions of cubic feet, in less than four days. For irrigation purposes, there is thus a storage of 1090 millions cubic feet, or 124,620 cubic feet for each acre of the area to be irrigated, exclusive of the local rainfall over that area. Allowing Colonel Rundall's estimate of one cubic yard per hour per acre for monsoon crops, this will be sufficient for 192 days, which is much more than the period required for the growth of the late or *aghani* rice, and leaves an ample supply for autumn cold-weather and spring cultivation.

In Kharakpur it appears to have been the custom to erect *dhār bands* or embankments across small hill streams, in order to intercept

their waters for purposes of irrigation. They were formerly constructed at the expense of the Darbhanga estate, by the *jath rayats* (headmen) of the villages within which they lay. As they were made without the necessary careful calculation of the amount of flood-water to which they were liable to be exposed, and were constantly being injured, it was proposed, in 1873, that a special examination and report should be made on all the embankments, and that they should be divided into three classes:—(1) Those likely to prove permanently remunerative, owing to the increased value given to a large area of land by their construction. (2) Those not likely to prove remunerative, but which, having been always maintained at the expense of the estate, could not be abandoned without hardship to the *rayats*, and which could be constructed in a solid manner at an expense not greater than the amount which, at five per cent., would yield the average annual expenditure on repairs. (3) Similar *bandhs* which should be maintained, but which could not be constructed within the above limit of expense. It was also suggested that it might be found desirable to erect *bandhs* at places where they had not hitherto existed. The Collector was asked to prepare returns, showing, if possible, the number and the area of the holdings which would be benefited, with their rental. His reply gave voluminous details, and it appeared that the earthwork had in that year been executed in places in anticipation of sanction. The total of the estimate for which sanction was ultimately given was £3047, 10s. 7½d. The scheme, which is not yet (1875) complete, will benefit 2057 farmers and 5743 acres of land. The cost will thus be under 12s. an acre.

THE FISHERIES of Monghyr District are very extensive on the Ganges and Gandak and their tributaries. The supply is at most periods of the year abundant, but is diminished at the season of the highest floods. The ordinary manner of catching fish is by means of nets; but sometimes, and particularly in shallow waters, spears are used. The Banpars and Gonris are said to be most expert in the use of these weapons. Dūbārū Keuts, who are good divers, pursue fish under water with the spear. The number of persons returned by the Census of 1872 as belonging to the fishing castes is 57,834, which would give about 10,000 fishermen. In 1811, Dr. Buchanan Hamilton estimated the profit of a fisherman's labour at about Ra. 4 a month, and that fish sold at three pounds weight for a penny. The price is now three times as great, and the monthly profit is at

least doubled. The annual value, therefore, of the fisheries of the District is almost £96,000. The following are some among the fisheries in Monghyr, with their extent and annual rental:—A reach of the Halahár river in *parganá* Maldah, 6 miles long and 150 yards wide, is rented at £12 a year. A reach of the Keul river, in *parganá* Sekandrá, 4 miles long and 100 yards wide, at £20 a year. The fishing rights in the Man river, in *parganá* Kharakpur, 26 miles long and 100 yards wide, at £4 per annum. The Gurkhá fishery, in *parganá* Kajrá, 2 miles long and 100 yards wide, £25 a year. The Dakra Nálá fishery, in *parganá* Monghyr, 8 miles long and 100 yards wide, at £24 a year. The Mainwa nálá fishery, in *parganá* Monghyr, 6 miles long and 200 yards wide, £10 a year. The right of fishing in the Tiljúgá river, within *parganá* Pharkiyá, 40 miles long and 50 yards wide, is held on a lease at £26 a year. And the Mairah, also in *parganá* Pharkiyá, 1 mile long and 50 yards wide, at £27, 10s. od. a year.

The most common fishes found in the rivers of Monghyr District are,—the *nádní* (*Cyprinus kalibansa* or *atratus*); the *naola*, the half-grown fry of the last; *mirgal* (*Cyprinus mirga*); *katlá* (*Cyprinus katla*); *rui* (*Cyprinus ruhita*); *chapra* (*Trichopodus khalisa*); *gajar* (*Ophiocephalus wrahl*); mullet (*Mugil Indica*). The Siluroids are,—*kanach* (*Silurus pugentissimus*); *tengra* (*Macroneo lamarri*); *rita* (*Rita ritoedes*); *gobta* (*Callichrous chekra*); *boáli* (*Wallago attu*); *patosi* (*Aillichthys punctata*); *bagar* (*Bagarius yarelli*); *singhi* (*Saccobranchus fossilis*); *silaud* (*Silundia Gangetica*); *pangas* (*Pangasius Buchanani* or *Pimelodus pangash*); *chitál* (*Mystus chittala*); *corva* (*Belone cancila*); *moh* (*Notopterus kaporat*); the ray (*Batoides ordes*); *baghair* (*Pimelodus baghar*); *hilsá* (*Clupea alosa*); and the *bám* (*Nurcena bam*). The *mahstr* (*Barbustor*), a fish well known to anglers, is met with in the river Man, but, owing to the scantiness of water in the dry season, does not grow to any size. When the Kharakpur irrigation works on this river are complete, and the stored-up water forms a lake among the hills, it will have room to grow to a larger size, and *mahstr* fishing will, it is anticipated, form an additional attraction to Monghyr.

There is a considerable trade in shells of the fresh-water mussel (*Unio*), and of the marsh snail (*Ampullaria*). They are collected in thousands in the Pharkiyá marshes, and yield a very pure lime, worth from £2 to £2, 10s. od. a ton, when the carbonic acid has been separated by heat.

THE MINERALS found in Monghyr District are almost entirely confined to the south of the Ganges. The more important are the following:—Galena, a sulphuret of lead, containing a small quantity of silver, found in the hill tracts of *parganá* Chakál. Minium, or protoxide of lead, from the bed of the Kharakpur hill streams. Antimony ore, a sulphuret of antimony, from the Chakál hills; sold in the *bádar* under the name of *surma*, and used by *zandá* ladies for tinting their eyebrows. A rich iron ore is quarried in the Kharakpur hills near Bhímabándh; actynotite is found in the same neighbourhood. Hematite, or peroxide of iron, is an impure or earthy species of iron oxide, combined to some extent with alumina, silica, and a trace of alkali. The percentage of pure iron oxide, as near as possible, is sixty per cent. It would be valuable for smelting, if limestone as a flux and coal or other fuel were cheap. As the District, however, is destitute of carboniferous strata, and wood is too dear, it is only used as a cheap pigment for painting. It is found principally in the Kharakpur hills. Felspar fit for the manufacture of porcelain is met with in great abundance in the southern part of the District. Corundum is obtained from the hills near Jamál, but the precious forms are not met with. Travertine is found near Gidhaur and in the Kharakpur hills. *Kankar* or nodular limestone, principally used for metalling the roads, is found more or less in all parts of the District, mostly in the older tertiary formations of alluvial origin. There are also stone and slate quarries in the District. Of the latter the most extensive is in *parganá* Abhaipur, and is the property of Messrs. Ambler & Co., of Monghyr.

THE FOREST TRACTS of Monghyr were returned in some statistical tables, published by the Board of Revenue in 1872, as covering an area of 427 square miles, mostly situated in *parganá*s Gidhaur, Chándanbhúká, and Chakál. The Collector in 1871 reported, seemingly on information derived from the police, that the Gidhaur forests yielded an annual rental of £750, and those of Chakál £130. He added that, after having seen a large part of this country, he could not say there was much valuable timber grown in it. There is a forest tract in the Kharakpur estate of the Mahárájá of Darbhanga, which for some years was leased to European merchants in Monghyr at £950 a year. It measured ten miles long by four wide. The jungles of *parganá* Kajrá consist chiefly of acacias, and are valuable for the gum they produce. In *parganá* Pharkiyá there is some scrub forest, in the formation of which the wild rose takes an

important part. The principal forest trees of Monghyr are,—(1) *sál* (*Shorea robusta*), locally known as the *sakná*, a member of the Malay camphor family, and found chiefly in the Kharakpur hills. The utter absence of all forest conservancy has long ago caused the disappearance of all the larger trees; and when the East India Railway was being constructed, a contractor for sleepers found a lease of these hills on moderate terms a losing speculation. It must, however, be remarked, that except for railway sleepers and beams for European houses, large timber is not required. The principal demand is for *gols*, or posts, fifteen feet high, which are used as supports to the roofs of native huts. They cost about 4 *ánnds* or 6d. each in the forest, and after paying a transit toll of 2 *ánnds* or 3d., sell at Monghyr for about 8 *ánnds* or 1s.; (2) *abnús*, or ebony (*Diospyros melanoxylon*); (3) *tún* (*Cedrela toona*); (4) *satsdl* (*Dalbergia latifolia*); (5) *kantal* (*Artocarpus integrifolia*); (6) *pítsdl* (*Pterocarpus marsupium*); (7) *sissú* (*Dalbergia sissu*); (7a) *ám*, or mango (*Mangifera Indica*); (8) *mahuá* (*Bassia latifolia*); (9) *bat* (*Ficus Bengalensis*); (10) *pípal* (*Ficus religiosa*); (11) *pákur* (*Ficus infectoria*); (12) *badám* (*Terminalia catappa*); (13) *somí* (*Prosopis spicigera*); (14) *sonálu* (*Cassia fistula*); (15) *gáb* (*Diospyros embryopteris*); (16) *kadam* (*Nauclea cadamba*); (17) *tetul* (*Tamarindus Indica*); (18) *simul* (*Bombax Malabaricum*); (19) *hara* (*Terminalia chebula*); (20) *pansaura* (*Grewia lepiaria*). The most common hedgerow trees are,—(21) swallow-wort, or *akhánd* (*Calotropis gigantea*); (22) wild castor, or *bághandí* (*Jatropha curcas*); (23) croton, or *beláti bághandí* (*Croton tiglium*); (24) the chaste plant, or *nisindú* (*Vitex negundo*), a verbena; (25) *nágphana* (*Cactus Indicus*); (26) the milk bush, or *dúdhid* (*Excoecaria insignis*), an euphorb; (27) the red berry (*Tinospora cordifolia*), a moon seed; (28) the silken parasite, or *amralata* (*Cassytha filiformis*), a laurel; (29) wild senna, or *chikora* (*Cassia tora*); (30) the Chinese lantern or balloon vine (*Cardiospermum halicacabum*); (31) wild acanthus, or *bakás* (*Justicia adhatoda*); (32) wild jute, or *pál* (*Corchorus fuscus*); (33) wild cotton, or *ban kápás* (*Hibiscus vitifolius*); (34) convolvulus, or *karsani* (*Porana pauculata*), a creeper; and (35) the wild rose, or *kuá* (*Rosa centifolia*).

JUNGLE PRODUCTS.—The first place among the jungle products of the Monghyr District must be given to the *mahuá* (*Bassia latifolia*), both on account of the extent of the country in which it grows, and for the value and usefulness of its products. It is found in large

forests in the hilly country in the south of the District. Thousands of tons of the petals are collected annually, and, mixed with cereal grains, form a cheap and nutritious food. Also, 100,000 gallons of a strong spirit are yearly distilled from them in the Government distilleries. The fruit yields a valuable oil, used in sweetmeats, for burning, and to adulterate *ghi* exported to Calcutta. The wood is hard, and fit for the naves of cart wheels. The bark is used medicinally as an astringent and tonic. Frankincense, obtained from *Boswellia thurifera*, is gathered to some extent in the jungles, as is also the gum called *gugal* from the allied *Balsamodendron mukul*. Roxburgh describes the whole plant as yielding a great fragrance like that of the finest myrrh. The gum is difficult of collection, as the pale juice which issues from a cut made in the tree is very watery, and rapidly evaporates, leaving a very minute portion of gum, which is not tenacious or elastic like myrrh. Gums for ordinary purposes are gathered from many trees, such as the mango, the *nim* (*Azadirachta Indica*), and a number of varieties of the *bābla* (*Acacia Arabica*); but so little care is taken in collecting them, that they generally contain a large percentage of earth and dirt. The gum called *dhūna*, much used as incense, and supposed to drive away mosquitoes, is gathered from the *sāl* (*Shorea robusta*). The myrobalan of commerce, the fruit of *Terminalia chebula*, is abundant in the forests; it makes a very good dye mixed with sulphate of iron or alum. The kernel of the fruit of *Buchanania latifolia*, called *chironji*, is much esteemed in the District, and is said to resemble the almond. Rope is made in large quantities from the jungle creeper *Bauhinia Vahlia*. It stands immersion in water without much injury, and is usually employed for drawing water from wells. Another kind of rope, used in all parts of the District, is made from a coarse grass called *sabí*, of which I cannot find the scientific name. Lac is collected to some extent for exportation, and for making bracelets, toys, etc. The insects are found on the small branches and petioles of the *pals* (*Butea frondosa*). This tree also affords a valuable gum, and its flowers a yellow dye of considerable permanence. The gum exudes from natural fissures and wounds made in the bark in the form of a beautiful red juice, which hardens into a ruby-coloured astringent gum, which loses its colour if exposed to the air. Honey is found in the jungles, and is occasionally collected. It does not, however, appear to be a general article of trade. The same may be said of india-rubber. The castes subsisting by traffic in jungle

products, as returned by the Collector, are Banpars, Musáhars, Dhárls, and Bhúiyás.

PASTURE-GROUNDS.—The principal pasture-lands north of the Ganges are in *parganá* Pharkiyá, and comprise all the alluvial country periodically inundated by the Ganges, Gandak, and Tiljúgá, which lies so low that the season for sowing even a spring crop has passed before the water recedes. The largest tract lies between the Gandak and the Tiljúgá, due north of Monghyr. An area of about twelve miles north and south by twenty miles east and west, or about two hundred square miles, is so deeply flooded that not more than half the land is ever cultivated, and hardly any lies sufficiently high for village sites. This tract forms the pasture-land of the later cold weather or spring and of the hot season, and is covered chiefly by a very rank *pod* grass and the graceful pampas grass, together with a scanty undergrowth of the more succulent kinds, such as *dúb*. Buffaloes thrive on this pasture better than oxen; and immense herds of them are sent to these prairies, as they may be called, from all the surrounding countries, and sometimes from the south of the Ganges. They graze here from January till the rising water forces them to retire in June. Their clarified butter or *ghi* is largely sold at the market of Khargariá at the mouth of the Gandak, for exportation to Calcutta. The rent levied by the landholders is about eight *ánnás* or one shilling a head for buffaloes, and four *ánnás* or sixpence for oxen, for the season.

The new-formed banks bordering the Ganges also afford pasturage during the dry seasons. The cattle are excluded from those which are cultivated, until after the *rabí* crop is cut in April; but are admitted on the sandy and uncultivated strips directly the soil is sufficiently firm to bear their weight, and are allowed to pick up a scanty subsistence from the young *kasela* shoots (*Saccharum officinarum*) and weeds, which spring up spontaneously after the river has fallen. The tamarisk bushes, most valuable for basket-making and firewood, are also found on nearly every bank; but these the cattle do not appear to fancy, eating them only when there is nothing else to feed on. The vast jungly tracts west of Kharakpur, and much of *parganá* Parbatpárá, Chándanbhuká, Kajrá, Gidhaur, and Chakái, form the pasture-grounds of the south of the District. The pasture, however, is of a very coarse description, consisting of young leaves and weeds. The cattle are belled to keep them together, but always run very considerable risk from wild beasts. In other parts of the

District they are fed with rice and wheat straw, and such scanty herbage as they can find by the roadsides and bordering the hedges. Grazing lands, properly speaking, set aside as in England, are unknown, every cultivable acre being required for producing food for man. An effort was made in 1873 to introduce a fodder, which, by the largeness of its out-turn, would induce its cultivation for purposes of cattle-feeding exclusively. This was the Chinese sugar-grass or *sorgho* (*Sorghum saccharatum*), which was described by the United States Agricultural Department as 'unsurpassed.' It was sown in the Government gardens in Monghyr in May, and grew to the height of seventeen feet before the end of the rains. So far as appearances went, it was a remarkable success; but it was little appreciated by the natives, by whom it was pronounced, when exposed at the public offices, to be a well-known and somewhat despised *ghoma janirā*, otherwise called *chotki janirā* or *markhatid*, which has the bad reputation of exhausting the soil and yielding an inferior kind of coarse grain, used as food only by the very poorest. Moreover, they did not hold it in high estimation as fodder, on account of its being heating. The highest bid made for the crop, standing on a plot of land measuring more than half an acre, was only twelve shillings. It was attempted to sell it by the bundle of a hundred-weight for 3d., but it could not find purchasers; while, at the same time, in the *bāsdar* a bundle weighing only a third of a hundredweight sold at this rate, although consisting only of weeds and coarse grass. The rent alone of the field was 10s. a year, so that the cultivation of *sorgho* was not a profitable undertaking. The Collector, in his report on the subject, was of opinion that the seed was sown at the wrong time of the year, as during the rains a large supply of grass and weeds can be obtained from the land on which the *bhādat* crops stand, merely for the trouble of cutting. In the cold and hot weather, however, a good crop of *sorgho* might command a better price; but even then cattle would probably continue to pick up a coarse food on the *chars* and uncultivated hills which abound in the District. In fact, the setting aside of land merely to grow fodder for cattle is an arrangement which does not at all coincide with the views of native cattle rearers, who laugh at the idea.

FERÆ NATURÆ: MAMMALS.—The following paragraphs have been chiefly condensed from a note on the *feræ naturæ* of the District supplied to me by the Collector, Mr. Lockwood:—'I have only observed two species of monkey in this District, the *langur* (*Presbytis*

entellus) and the *bandar* (*Inuus rhesus*). Both are very local. The former is found only south of the Ganges, and fortunately even there it is rare, for it does a vast amount of damage to the crops. The *bandars* also are found only in a few places, affecting certain localities, from which apparently they never migrate. Year after year officers in camp find them in the same mango groves. At Monkey Island, on the Kábār lake, they are particularly numerous, being venerated by the priests of the Hindu temple. Numbers come out from the jungle on all sides on being called; and the band is headed by a fierce old male, who apparently holds unlimited sway over the others. In the year 1793 a yearly grant of £ was made by Government for the express purpose of feeding the monkeys and lighting the temple on Monkey Island; but in 1852 the grant was discontinued, owing to its being misappropriated by the ruling priests. Bats are common all over the District. The frugivorous bats (*Pteropus*) are caught by the lower classes, and are said to be excellent eating. The long-tailed bat is occasionally seen; and other insectivorous bats are common. They are called *chámgúdri*, or leather-wings, by the natives. The long-armed bat (*Taphozous longimanus*) is a great pest in record rooms. Among insectivorous mammals deserving notice are the musk-shrews, which occur in extraordinary numbers. The *Tupaia Elliotti* abounds in the Kharakpur hills. It bears so great a resemblance to the common palm squirrel that it long escaped notice.

‘Among carnivora may be mentioned the black bear (*Ursus labiatus*). It is found generally throughout the hilly portion of the District, but is not common now. It is much sought after, both for the sake of the reward offered by Government for its head, and for the excellence of its flesh. The Santáls of the southern hills watch it when it comes to feed on the flowers of the *mahud*, and, concealed amongst the branches of the tree, shoot it with poisoned arrows. When unmolested it is usually an inoffensive animal. The Indian badger (*Mellivora Indica*) is not uncommon in the District, particularly among the Kharakpur hills. Others are said to be common in the rivers, but I have never seen one. Tigers are not common in this District, as the reward of £2, 10s. od. induces hunters to destroy them, usually by means of traps armed with bows and arrows set in the paths which they frequent. The District is very unfavourable for tiger-shooting, as the jungles are almost interminable, and so thick with under-scrub that the sportsman cannot

proceed on foot with any chance of success, whilst the passage of elephants would be impossible. Leopards are, or at all events were, more common, but the reward given for killing them also makes their pursuit very profitable, and is leading to their extermination. Wild cats are everywhere common, and destroy a vast amount of game. Indeed, were it not for the number of eggs which the game birds lay, they must have long ago become extinct. Almost every hedge of any size contains its jungle cat, ready to spring on any bird that comes near. Hyænas are found in the hills, but, being true nocturnal animals, they are seldom met with; but some caves, which have been tenanted by them from time immemorial, may be seen. Civets, both *Viverra zibetha* and *V. Malaccensis*, are far from uncommon, and do a vast amount of damage to game birds. I have only noticed the common mongoose (*Herpestes*). It is common everywhere, and, in consequence of its antipathy to snakes, is not molested. It is a great nuisance as a pet. I have never seen the wolf in this District; but Mr. Crowdy, of Manjhaul factory, tells me that he meets with it occasionally out hunting, but that his fox-hounds will not face it. The wild dog has occasionally been killed among the hills, but it appears to be becoming extinct. The Indian fox is found everywhere.

'The Gangetic porpoise abounds in the river, and is occasionally captured and eaten. Its oil is sold in the *bisár* for preserving leather and other purposes. The *Sciurus palmarum* is the only squirrel which I have seen in the District; it is common nearly everywhere, and is a pest in fruit gardens. Rats and mice are very common both in the fields and houses. The field rat is eaten by the *Musáhars*, and is considered by them a great delicacy. Porcupines are not uncommon, and are eaten whenever captured by the lower classes. Hares are not uncommon throughout the District, several being generally started during a day's shooting. Wild pigs are found sparingly all over the District in suitable places. Of deer, the *sámbar* stag (*Rusa Aristotelis*) is occasionally killed. The spotted deer (*Axis maculatus*) abounds towards the south, and often invades the cultivated country, to the serious injury of the standing crops. The swamp deer, or *bárd singhá* (*Rucervus Duvaucellii*), is not uncommon. Wild buffaloes are occasionally found in the north of the District, in *parganá* Pharkiyá.'

BIRDS.—Mr. Lockwood writes concerning the birds of the District:—'I have only noticed three species of vulture,—the common

vulture (*Gyps Bengalensis*), the black vulture (*Otogyps calvus*), and the Egyptian or scavenger vulture. All feed on carrion, and are for this reason extremely useful. The natives look on them with considerable abhorrence, and will often pull a house down if a vulture alights on it. Of the falcons there may be mentioned the peregrine, a cold-weather visitant, and the *saker* (*Falco sacer*). The Mahárájá Sir Jai Mangal Sinh, K.C.S.I., is the only native gentleman that I have seen who keeps up the old Indian sport of hawking. Of *Accipitrinæ*, the sparrow-hawk is the only species I have noticed. Monghyr is rich in fishing eagles. The osprey abounds near the Ganges, and in the vicinity of all the large marshes north of that river. The white-tailed eagle is equally common, and breeds in this District. Harriers abound during the cold season, and may be seen hawking over every field in search of small birds and lizards. The ortolan or short-toed lark (*Calandrella brachydactyla*) and quail are especially marked out as quarry by all the hawks. Owls are not very numerous, but the rock owl is found here.

‘Of *Insectores*, swallows, martins, and swifts are numerous, and the European swallow abounds during the cold season. The wire-tailed swallow may occasionally be seen in the Kharakpur hills; and on one occasion I noticed the spine-tailed swift there. Night-jars are found in localities similar to those they frequent in Europe. The common bee-eaters (*Merops viridis* and *M. Philippensis*) are found at certain seasons everywhere. Other species are rare. The beautiful Indian roller (*Coracias*), the jay of Europeans, abounds. It is one of the most familiar birds in this country. Its feathers are much prized as ornaments, and are taken home by anglers under the impression that they will make fine salmon flies, but the beautiful cobalt blue turns pink in water. Kingfishers are not so common here as in Bengal. The only species I have noticed are the *Halcyon fuscus*, *H. leucocephalus*, *Alcedo Bengalensis*, and the *Ceryle rudis*, which during the cold weather may be seen hovering over every tank in search of fish. The feathers of *H. fuscus*, which is insectivorous, are in great request for ornaments, and the bird-catchers snare them by thousands by means of a small net and a decoy bird. I have seen a successful party on their way to Calcutta with several thousand skins. In London, I was told by an eminent bird-stuffer that a good skin of the Indian roller or of *H. fuscus* was worth about five shillings for ladies’ hats. Hornbills are not uncommon. The Malabar pied hornbill (*Hydrocissa coronata*) has been met with in the

Kharakpur hills. Parakeets are common everywhere, and they do a considerable amount of damage to the crops. They are favourite cage birds. I have not noticed any great variety of woodpeckers in the District. By far the most common species is the golden-backed woodpecker (*Brachypternus aurantius*). Barbets are common everywhere. The species named *Megalaima viridis* is called the copper-smith, from its call resembling the noise made by smiths in making copper vessels. Although India is the headquarters of the cuckoo family, I have not observed many species here. The European cuckoo is not uncommon during the cold weather, but it returns to the hills during the breeding season, so that its familiar call is never heard. The pied cuckoo is heard everywhere during the rains, and the hawk cuckoo and *koel* abound at all seasons. The former is known as the hot-weather bird, as its shrill call ushers in that season. The latter seems to take possession of every crow's nest it can find to deposit its eggs in; at least, nearly every crow's nest I have inspected has had a *koel's* egg in it. *Malkohas* are occasionally seen. *Konkals* (*Centropus*) or crow-pheasants are very common, and the *sirkir* (*Taccocua*) are met with in the Kharakpur hills. Honey-suckers, or humming-birds, as they are generally called by Europeans, are common everywhere. In every garden where the Spanish jasmin (*Plumeria* or *Hamelia patens*) is found, several species may be seen inserting their little beaks into the pipe-like flowers to extract the nectar. Nut-hatches are not uncommon, and are met with all over the District during the cold weather. Hoopoes are found in every garden. *U. nigripennis* built its nest and reared its young in an old building in the jail last spring. This bird is supposed to have been a great favourite with Solomon, and is accordingly not molested by Muhammadans. One or two species of shrike are common. *Lanius cristatus* is the first migrant to appear at the commencement of the cold season. I always note the day of its arrival, as people in England note the swallow's arrival in spring. All the three Indian species of cuckoo shrike (*Volvocivora*) are found in the District. The beautiful minivets are cold-weather visitants, and may be seen in flocks searching for insects in almost every grove. The Drongo shrike or king crow is seen everywhere. The family of *Muscicapidæ* is fairly represented. The Paradise fly-catcher (*Tchitrea paradisi*) is not uncommon in the well-wooded country to the north of the District. The curious transition of this species from chestnut to white is, so far as I know, unique among birds. The theory that white is the nuptial plumage,

cannot, I think, be correct, as I have seen the white male pair with the chestnut female, and *vice versâ*, during the breeding season. Fantails (*Leucocerca*) are not uncommon in the woods. The *Merulinæ* are badly represented. The orange-headed ground thrush (*Geocichla citrina*) may occasionally be seen in the Government gardens during the cold weather, and the blue rock thrush (*Petrocossyphus cyaneus*) appears also at the same season. Both retire northwards to breed. The babbling thrushes (*Timalinæ*) are fairly represented here. The *kachhachiyâ* or *sâthbhâi* of the natives (*Malacocercus terricolor*) is seen in every hedge and garden; about seven are usually seen together, hence the name "seven brothers." Their bright-blue eggs are characteristic of the genus. Other species occur in the District, but they are not a very interesting family. The bulbuls or short-legged thrushes are not so numerous as in other parts of Bengal; they are caught by the *shikâris* on account of their plumage, and for fighting. The green *Phyllornis* is abundant. It frequents mango trees, which towards Kharakpur are much infested by the *Ioranthus*. The flowers of this parasite appear during the cold season, and are rich in nectar, on which the bird feeds. The little white-winged green bulbul (*Iora typhia*) is also very common in the cold weather, and, I think, should be properly classed with the tits, as its note, size, and habits are quite those of the English blue titmouse. Orioles abound in every grove. When they put on their nuptial plumage in the spring, their beauty cannot be surpassed, and their skins are in much request. One species comes very near the *Auricus* of Europe, but has a longer black mark behind the eyes. Its nest is beautifully compact. Of *Ruticillæ*, the Indian redstart is common everywhere during the cold weather. The ruby-throat is occasionally seen in the *rabi* fields; and the blue-throat (*Cyanecula suecica*), so like the European bird, is equally common. Reed-warblers abound in suitable places. On the Kâbar lake they are particularly numerous. Among the sub-family *Drymoicinæ*, the Indian tailor-bird is abundant, being found in almost every hedge. Its nest is a model of ingenuity and beauty. The weaver-bird, or *baya*, is generally miscalled the tailor-bird by Europeans. The minute *Phylloscopinæ*, or tree-warblers, are well represented in the cold weather. The *Reguloides proregulus*, the Dalmatian *regulus*, so rare in Europe, is not uncommon here. The wagtails are all migrants, leaving us before their pairing season in the spring, and returning at the first approach of the cold weather.

Their arrival is always welcome, as it denotes that the thermometer will fall below 80° at sunrise. They breed in Bhutan and across the Himálayas. The field wagtails are amongst the most numerous of the cold-weather birds. The same may be said of their cousins the pipits. Of the tits, so familiar in Europe and in the Himálayas, I have only noticed the grey titmouse (*Parus cinereus*). This little bird occasionally appears during the cold season, and its form and note are hardly distinguishable from the British oxeye. Of the family Corvidæ we have several species. The corby and the common crow abound everywhere. The Indian magpie is one of our most familiar birds. The starlings are well represented by the *máinas*, several species of which remain with us all the year round. The European starling is common during the cold season, coming in immense flocks, which are nearly always joined by the *máinas*. The bank *máinas* are also abundant along the Ganges, breeding on its banks. It is the only bird that I know, which, breeding in holes of banks or trees, lays coloured eggs, which are of a bright green; whilst those of the owls, kingfishers, woodpeckers, barbets, and others which have similar nests, are invariably white. The Fringillidæ are not so well represented as we should expect to find them, considering the abundance of food suited to them ever present in Behar. The weaver-bird (*Ploceus baya*) is, however, common, and its curious nests may be seen in nearly every village. The *munias*, or Amadavads of Europeans, are found in suitable places. They are known here as *lúls*, and thousands are yearly captured for cage birds, as their pugnacity towards each other in confinement appears to amuse the natives who keep them. The Indian house-sparrow, only distinguishable from its European cousin to the scientific eye, is common everywhere. The rose finch, or *tuti*, is not uncommon during the cold weather. Its beauty has marked it for captivity. The curious little finch-lark (*Pyrrhulauda grisea*) is common in the fields; and the skylark also abounds. In *pargand* Pharkiyá, in the north of the District, it is particularly common. The green pigeon (*Crocopus phœnicopterus*) is largely met with, its chief food being the fig of the banyan tree. The upper-class natives consider them, as indeed they are, excellent eating. The blue rock pigeon is equally common, and although ordinarily rather wild, occasionally enters verandas to build its nest on the cornices. Turtle-doves are found in almost every grove. The beautiful ground-dove, with emerald-like wings, is also sometimes seen.

Among the Rasores, the peacock is found throughout the hill jungles in the south, particularly in *parganá Chakál*. At Bhímbandh, in the Kharakpur hills, it is very common, and many may be seen in the early morning going out to feed. As it is sacred to Kártik, the younger son of Mahádeo, or the great god, it is rarely molested by Hindus. The jungle-fowl (*Gallus ferrugineus*), the progenitor of the domestic fowl, is found in the same jungles with the peacock. The exquisite shape of its hackles, when compared with those of the domestic fowl, makes them very valuable for salmon flies. This fact has escaped the notice of many professional fly-tiers, who are only acquainted with the wax-spotted hackles of the Madras bird (*Gallus sonnerati*). The red spur-fowl (*Galloperdix spadiceus*) is occasionally seen. Of partridges, the grey species is abundant in scrub jungle south of the Ganges. The black partridge, or francolin, affects the grass prairies in the north of the District; and the marsh or *kyat* partridge is found in the low lands in *parganá Pharkiyá*. The common quail abounds in the *rabí* crops. The black-breasted quail, which breeds in this District, is not nearly so abundant as the common quail, which migrates in the spring to breed beyond the Himálayas, and consequently has a better chance in the struggle for existence than it would have here, where so many four-footed, flying, and creeping enemies, in the shape of cats, foxes, hawks, and snakes, are ever ready to devour it and its eggs. Bustards are rarely seen.

The Cursorae are represented by the courier plover, which is found chiefly on the alluvial *didrá* lands bordering the Ganges. Two species of swallow plover, the pratincole of Europe, are common, and may be seen in large flocks hawking for insects on the banks of rivers. Other species of plover are common,—the golden plover during the cold weather, and the spur-winged plover at all seasons. The Norfolk plover, so rare in England, is particularly common among the rocks here. Cranes (*Grus Antigone* and *G. cinerea*) come during the cold season, and are much pursued by *shikáris*. When a bird is winged, it is seldom killed, but is sold in its wounded state to native gentlemen, who keep it, if it survives the injury, as a pet in their court-yards. Many tame birds thus acquired may be met with. On one occasion I found the woodcock; it had evidently lost its way, or had been blown here from the Himálayas. Snipe are not so common in Monghyr as in other parts of Bengal. The English and pintail species (*Gallinago stenura*) appear to be nearly equally distributed. The painted snipe and jack snipe are rare. Godwits

appear in vast flocks on the marshes in *parganá* Pharkiyá during the cold season; and the graceful avocet may be occasionally seen along the banks of the Ganges. Curlews and whimbrels (*Numenius phaeopus*) are found in the Pharkiyá marshes. Among the stints and sand-pipers met with in this District, may be mentioned the ruff (*Philomachus pugnax*), the little stint (*Tringa minuta*), the spotted, green, and common sand-pipers. These appear in vast numbers during the cold season, whilst the green-shank and red-shank are found on every marsh. The elegant stilt (*Himantopus candidus*), so rare in Europe, is abundant here during the cold season. Nearly all the wading family are migrants, retiring beyond the Himálayas to breed. Both the Indian jacanas (*Motopidius*) abound in the marshes to the north of the District, where they remain all the year round. The coots are well represented also in the marshes; and conspicuous amongst the family is the purple species, found on every reedy swamp. Several species of rail also are found in the same localities, but they are not so common or abundant as the coots and water-hens. Storks are found throughout the District. The adjutant is only occasionally seen; but the white-necked stork or beef-steak bird (*Ciconia leucocephala*) is very common during the winter months. The white stork of Europe, so much cherished in Germany, is also at times met with. The European heron is found throughout the District, but it does not breed in company as in England. The purple heron of Europe is also abundant; and I have met with several of its breeding-places in the vast reed beds towards the north. Egrets, or paddy birds, as they are familiarly called, abound during the rainy season, when they put on their nuptial plumage. They are very graceful birds, and their feathers are in much request, as they can be sold in Calcutta at about a guinea an ounce. Bitterns do not appear to be so common here as in other parts of Bengal; but the allied night heron of Europe (*Nycticorax griseus*) abounds, and its familiar call may be heard on still evenings as it passes to its feeding-grounds. The spoonbill is occasionally seen in the Pharkiyá marshes; and the shell ibis (*Anastomus oscitans*) is most abundant. There are several species of ibis, amongst which the sacred ibis of Europe and Africa is met with in great flocks.

The marshes in the north of the District form the home of myriads of geese and ducks during the cold season. I have observed the following species:—The *naklar* or grey goose (*Anser cinereus*), the barred-headed goose (*A. Indicus*), the white-headed

goose-rail (*Nettapus Coromandelianus*), the whistling teal (*Dendrocygna*), the sheldrake (*Tadorna vulpanser*), the ruddy sheldrake (*Casarca rutila*), the shoveller (*Spatula clypeata*), the pink-headed duck (*Anas caryophyllacea*), the gadwall (*Chaulelasmus streperus*), the pintail duck (*Dafla acuta*), the widgeon (*Mareca Penelope*), the teal (*Querquedula crecca*), the gargany (*Querquedula circia*), the red-crested pochard (*Branta rufina*), the red-headed pochard (*Aythya ferina*), the ferruginous duck (*Aythya nyroca*), and the tufted duck (*Fuligula cristata*). The last twelve are found in England. Grebes (*Podiceps*) are found on most of the marshes, where also terns abound. The whiskered tern, an uncommon bird in England, and the gull-billed tern, are common here. The curious Indian skimmer (*Rhynchops albicollis*), with its razor-like lower mandible much longer than the upper, may be seen skimming over the Ganges everywhere; and only on one occasion, when I saw a small fish in its beak, did I ever notice that this bird takes any food except water and air. Pelicans, or river sheep, as the natives call them, are seen occasionally swimming in the rivers and marshes, or soaring far overhead. They are much detested by fishermen, according to the old principle, that two of a trade never agree; indeed, the fishermen have some cause for disliking them, for a flock of pelicans, when they alight, form a regular line, and swim along, devouring every fish which comes in their way. Cormorants are common in suitable localities; and the nearly allied Indian snake-bird (*Plotus melanogaster*) pays dearly for the beauty of its scapular feathers, for the *shikáris* during the breeding season pursue it as eagerly as they do the egrets.

REPTILES.—‘Crocodiles abound in the north of the District. Marsh crocodiles (*Crocodilus palustris*), the alligators of Europeans, and the *magars* or *bochars* of the natives, are very numerous in the Tiljúdá river, and during the rains in the neighbouring inundated marshes. One hundred individuals of all sizes may be counted during the cold season basking in the sun along a single reach of the river. With them may be seen a few *gharials* and many turtles, all apparently living in perfect harmony together, and finding food in the swarms of fish which live around them. The *bochars* and turtles, if not the *gharials*, also feed on the dead bodies of men and animals when they can get them. The *gharial* (*Gavialis Gangeticus*) chiefly affects the Ganges, where the *bochar* is almost unknown, and at sunrise several may be seen on every sandbank. They are

said to be exclusively fish-eaters. Small specimens are not unfrequently caught in the fishermen's nets, and are eaten by the lower classes. Fresh-water turtles abound. The carapace is invariably used as a hod for carrying mortar. The most remarkable lizards in the District are the Varanidæ or *gosāmps*, the iguanas of Europeans; three species are found,—*Hydrocaurus Salvator*, the monitor (*Varana dracæna*), and *Empagusia flavescens*. The monitor, which may be distinguished by the position of the nostrils half-way between the lip and the eye, abounds everywhere, and is supposed, without reason, to be very venomous. Many species of small tree-lizards, among which is the dreaded though perfectly harmless 'blood-sucker,' are found; and the chameleon is not uncommon. When captured, the chameleon is always kept for sale. Among other thick-tongued lizards may be mentioned the wall *gæko*, which abounds in every house.

'SNAKES are numerous in Monghyr District. The rock snake (*Python moluris*), the boa-constrictor of Europeans, is found on the hills. The skin of one individual, ten feet long, lately killed in *pargand* Abhaipur, is exhibited in the Monghyr museum. The cobra is by far the most common snake. The Monghyr municipality, during the past two years, has given rewards for 1000 cobras alleged to have been killed within the precincts of the town, whilst the Jamālpur municipality, six miles distant, has paid for a nearly equal number. Notwithstanding this, their numbers do not appear sensibly to have decreased; but it is satisfactory to learn that deaths from snake-bite are now rare within the towns, compared with what they were a few years ago. Next to the cobra, the *karait* (*Bungarus caeruleus*) abounds, but is not nearly so often met with as the former. *Bungarus fasciatus* and *Daboia Russellii* are both very rare here, only one specimen of each having been brought in for reward. Vipers are occasionally found. The *sakrá* (*Lycodon aulularia*), a pretty little harmless snake, declared by the natives to be very deadly, abounds, as its specific name implies, in dwelling-houses and other buildings. Another snake, rare in museums, is not uncommon here,—*Ferrania Sibboldii*. The little Typhlops, which resembles the earthworm, is common. It is known as the *thilid sām̐*, the meaning of which is said to be that the poisonous effects of its bite can only be removed by the speedy application of an earthen vessel (*thilid*) full of oil.'

The cost of keeping down wild beasts, as represented by rewards

paid by Government, was £236, 2s. od. in 1866-67; £254, 18s. od. in 1867-68; and £193, 10s. od. in 1868-69. The deaths caused by wild beasts were 108, 91, and 179 for these three years respectively; and from snake-bites, 37, 46, and 127.

POPULATION.—The earliest attempt made towards an enumeration of the people of Monghyr was in the year 1802, when a *khând sumdri* or house census was commenced. From this it was intended to derive an estimate of the population, by multiplying by a certain number, assumed to represent the average number of inmates in each house. It does not now appear how far this scheme was carried out; but Dr. Buchanan Hamilton, in 1817, says of the returns of two police divisions which he had been able to find, that they satisfied him that he had nothing to regret in the loss of the others. Dr. Buchanan Hamilton himself made an estimate of each of the police divisions in the whole District of Bhágalpur, in which Monghyr was then included. These old divisions unfortunately do not coincide with the boundaries of Monghyr in any direction; but by taking only those which are entirely included in the present District, some figures of statistical value may be obtained. These police divisions are:—(1) Gogri, with an area of 788 square miles, and a population of 150,700; Monghyr, 113 square miles, and a population of 45,300; Súrajgarha, 103 square miles, and a population of 39,600; Mallahpur, 697 square miles, and a population of 150,000; and Tárápur, 643 square miles, and a population of 179,800: total area, 2344 square miles, and total population, 571,400, of whom 464,775 are stated to be Hindus, and 106,625 Musalmáns. The population at the present day for the same area is about double this estimate. But considering that land reclamation has been largely carried on both on the north and south of the Ganges, and that the number of the people is known to have increased in consequence of immigration and much prosperity combined, it is very probable that Dr. Buchanan Hamilton's estimate was, at the time it was made, at least approximately correct. After this time there was no systematic effort to enumerate the people, even in part, till 1869. The rural police frequently sent in returns of the number of houses in the villages to which they were attached, on which rough estimates were founded. In 1869 this method gave 843,775 souls in the District, five persons being allowed to each household, and was declared by the Collector to be 'too high a computation.' In the same year an experimental Census was carried out in the five towns of Monghyr, Jamálpur,

THE MINERALS found in Monghyr District are almost entirely confined to the south of the Ganges. The more important are the following :—Galena, a sulphuret of lead, containing a small quantity of silver, found in the hill tracts of *parganá* Chakál. Minium, or protoxide of lead, from the bed of the Kharakpur hill streams. Antimony ore, a sulphuret of antimony, from the Chakál hills; sold in the *básár* under the name of *surma*, and used by *sandá* ladies for tinting their eyebrows. A rich iron ore is quarried in the Kharakpur hills near Bhímabándh; actynotite is found in the same neighbourhood. Hematite, or peroxide of iron, is an impure or earthy species of iron oxide, combined to some extent with alumina, silica, and a trace of alkali. The percentage of pure iron oxide, as near as possible, is sixty per cent. It would be valuable for smelting, if limestone as a flux and coal or other fuel were cheap. As the District, however, is destitute of carboniferous strata, and wood is too dear, it is only used as a cheap pigment for painting. It is found principally in the Kharakpur hills. Felspar fit for the manufacture of porcelain is met with in great abundance in the southern part of the District. Corundum is obtained from the hills near Jamál, but the precious stones are not met with. Travertine is found near Gidhaur and in the Kharakpur hills. *Kankar* or nodular limestone, principally used for metalling the roads, is found more or less in all parts of the District, mostly in the older tertiary formations of alluvial origin. There are also stone and slate quarries in the District. Of the latter the most extensive is in *parganá* Abhaipur, and is the property of Messrs. Ambler & Co., of Monghyr.

THE FOREST TRACTS of Monghyr were returned in some statistical tables, published by the Board of Revenue in 1872, as covering an area of 427 square miles, mostly situated in *parganá*s Gidhaur, Chádanbhuká, and Chakál. The Collector in 1871 reported, seemingly on information derived from the police, that the Gidhaur forests yielded an annual rental of £750, and those of Chakál £130. He added that, after having seen a large part of this country, he could not say there was much valuable timber grown in it. There is a forest tract in the Kharakpur estate of the Mahárájá of Darbhanga, which for some years was leased to European merchants in Monghyr at £950 a year. It measured ten miles long by four wide. The jungles of *parganá* Kajrá consist chiefly of acacias, and are valuable for the gum they produce. In *parganá* Pharkiyá there is some scrub forest, in the formation of which the wild rose takes an

important part. The principal forest trees of Monghyr are,—(1) *sál* (*Shorea robusta*), locally known as the *sakná*, a member of the Malay camphor family, and found chiefly in the Kharakpur hills. The utter absence of all forest conservancy has long ago caused the disappearance of all the larger trees; and when the East India Railway was being constructed, a contractor for sleepers found a lease of these hills on moderate terms a losing speculation. It must, however, be remarked, that except for railway sleepers and beams for European houses, large timber is not required. The principal demand is for *gols*, or posts, fifteen feet high, which are used as supports to the roofs of native huts. They cost about 4 *ánnds* or 6d. each in the forest, and after paying a transit toll of 2 *ánnds* or 3d., sell at Monghyr for about 8 *ánnds* or 1s.; (2) *abnús*, or ebony (*Diospyros melanoxylon*); (3) *tún* (*Cedrela toona*); (4) *satsdl* (*Dalbergia latifolia*); (5) *kantal* (*Artocarpus integrifolia*); (6) *pltsdl* (*Pterocarpus marsupium*); (7) *sissú* (*Dalbergia sissu*); (7a) *ám*, or mango (*Mangifera Indica*); (8) *mahuá* (*Bassia latifolia*); (9) *bat* (*Ficus Bengalensis*); (10) *pípal* (*Ficus religiosa*); (11) *pákur* (*Ficus infectoria*); (12) *badám* (*Terminalia catappa*); (13) *somí* (*Prosopis spicigera*); (14) *sonálu* (*Cassia fistula*); (15) *gáb* (*Diospyros embryopteris*); (16) *kadam* (*Nauclea cadamba*); (17) *tetul* (*Tamarindus Indica*); (18) *simul* (*Bombax Malabaricum*); (19) *hara* (*Terminalia chebula*); (20) *pansaura* (*Grewia lepiaria*). The most common hedgerow trees are,—(21) swallow-wort, or *akhánd* (*Calotropis gigantea*); (22) wild castor, or *bághandí* (*Jatropha curcas*); (23) croton, or *beláti bághandí* (*Croton tiglium*); (24) the chaste plant, or *nisindú* (*Vitex negundo*), a verbena; (25) *nágphana* (*Cactus Indicus*); (26) the milk bush, or *dúdhíá* (*Excoecaria insignis*), an euphorb; (27) the red berry (*Tinospora cordifolia*), a moon seed; (28) the silken parasite, or *amralata* (*Cassytha filiformis*), a laurel; (29) wild senna, or *chíkora* (*Cassia tora*); (30) the Chinese lantern or balloon vine (*Cardiospermum halicacabum*); (31) wild acanthus, or *bakds* (*Justicia adhatoda*); (32) wild jute, or *pát* (*Corchorus fuscus*); (33) wild cotton, or *ban kápds* (*Hibiscus vitifolius*); (34) convolvulus, or *karsani* (*Porana paniculata*), a creeper; and (35) the wild rose, or *kud* (*Rosa centifolia*).

JUNGLE PRODUCTS.—The first place among the jungle products of the Monghyr District must be given to the *mahuá* (*Bassia latifolia*), both on account of the extent of the country in which it grows, and for the value and usefulness of its products. It is found in large

forests in the hilly country in the south of the District. Thousands of tons of the petals are collected annually, and, mixed with cereal grains, form a cheap and nutritious food. Also, 100,000 gallons of a strong spirit are yearly distilled from them in the Government distilleries. The fruit yields a valuable oil, used in sweetmeats, for burning, and to adulterate *ghi* exported to Calcutta. The wood is hard, and fit for the naves of cart wheels. The bark is used medicinally as an astringent and tonic. Frankincense, obtained from *Boswellia thurifera*, is gathered to some extent in the jungles, as is also the gum called *gugal* from the allied *Balsamodendron mukul*. Roxburgh describes the whole plant as yielding a great fragrance like that of the finest myrrh. The gum is difficult of collection, as the pale juice which issues from a cut made in the tree is very watery, and rapidly evaporates, leaving a very minute portion of gum, which is not tenacious or elastic like myrrh. Gums for ordinary purposes are gathered from many trees, such as the mango, the *nim* (*Azadirachta Indica*), and a number of varieties of the *babla* (*Acacia Arabica*); but so little care is taken in collecting them, that they generally contain a large percentage of earth and dirt. The gum called *dhūna*, much used as incense, and supposed to drive away mosquitoes, is gathered from the *sil* (*Shorea robusta*). The myrobalan of commerce, the fruit of *Terminalia chebula*, is abundant in the forests; it makes a very good dye mixed with sulphate of iron or alum. The kernel of the fruit of *Buchanania latifolia*, called *chironji*, is much esteemed in the District, and is said to resemble the almond. Rope is made in large quantities from the jungle creeper *Bauhinia Vahlia*. It stands immersion in water without much injury, and is usually employed for drawing water from wells. Another kind of rope, used in all parts of the District, is made from a coarse grass called *sabī*, of which I cannot find the scientific name. Lac is collected to some extent for exportation, and for making bracelets, toys, etc. The insects are found on the small branches and petioles of the *pālās* (*Butea frondosa*). This tree also affords a valuable gum, and its flowers a yellow dye of considerable permanence. The gum exudes from natural fissures and wounds made in the bark in the form of a beautiful red juice, which hardens into a ruby-coloured astringent gum, which loses its colour if exposed to the air. Honey is found in the jungles, and is occasionally collected. It does not, however, appear to be a general article of trade. The same may be said of india-rubber. The castes subsisting by traffic in jungle

products, as returned by the Collector, are Banpars, Musáhars, Dháris, and Bhúiyás.

PASTURE-GROUNDS.—The principal pasture-lands north of the Ganges are in *parganá* Pharkiyá, and comprise all the alluvial country periodically inundated by the Ganges, Gandak, and Tiljúgá, which lies so low that the season for sowing even a spring crop has passed before the water recedes. The largest tract lies between the Gandak and the Tiljugá, due north of Monghyr. An area of about twelve miles north and south by twenty miles east and west, or about two hundred square miles, is so deeply flooded that not more than half the land is ever cultivated, and hardly any lies sufficiently high for village sites. This tract forms the pasture-land of the later cold weather or spring and of the hot season, and is covered chiefly by a very rank *pod* grass and the graceful pampas grass, together with a scanty undergrowth of the more succulent kinds, such as *dúb*. Buffaloes thrive on this pasture better than oxen; and immense herds of them are sent to these prairies, as they may be called, from all the surrounding countries, and sometimes from the south of the Ganges. They graze here from January till the rising water forces them to retire in June. Their clarified butter or *ghí* is largely sold at the market of Khargariá at the mouth of the Gandak, for exportation to Calcutta. The rent levied by the landholders is about eight *ánnás* or one shilling a head for buffaloes, and four *ánnás* or sixpence for oxen, for the season.

The new-formed banks bordering the Ganges also afford pasturage during the dry seasons. The cattle are excluded from those which are cultivated, until after the *rabí* crop is cut in April; but are admitted on the sandy and uncultivated strips directly the soil is sufficiently firm to bear their weight, and are allowed to pick up a scanty subsistence from the young *kasela* shoots (*Saccharum officinarum*) and weeds, which spring up spontaneously after the river has fallen. The tamarisk bushes, most valuable for basket-making and firewood, are also found on nearly every bank; but these the cattle do not appear to fancy, eating them only when there is nothing else to feed on. The vast jungly tracts west of Kharakpur, and much of *parganá* Parbatpárá, Chándanbhuká, Kajrá, Gidhaur, and Chakáí, form the pasture-grounds of the south of the District. The pasture, however, is of a very coarse description, consisting of young leaves and weeds. The cattle are belled to keep them together, but always run very considerable risk from wild beasts. In other parts of the

District they are fed with rice and wheat straw, and such scanty herbage as they can find by the roadsides and bordering the hedges. Grazing lands, properly speaking, set aside as in England, are unknown, every cultivable acre being required for producing food for man. An effort was made in 1873 to introduce a fodder, which, by the largeness of its out-turn, would induce its cultivation for purposes of cattle-feeding exclusively. This was the Chinese sugar-grass or *sorgho* (*Sorghum saccharatum*), which was described by the United States Agricultural Department as 'unsurpassed.' It was sown in the Government gardens in Monghyr in May, and grew to the height of seventeen feet before the end of the rains. So far as appearances went, it was a remarkable success; but it was little appreciated by the natives, by whom it was pronounced, when exposed at the public offices, to be a well-known and somewhat despised *ghoma janirā*, otherwise called *chotki janirā* or *markhatidā*, which has the bad reputation of exhausting the soil and yielding an inferior kind of coarse grain, used as food only by the very poorest. Moreover, they did not hold it in high estimation as fodder, on account of its being heating. The highest bid made for the crop, standing on a plot of land measuring more than half an acre, was only twelve shillings. It was attempted to sell it by the bundle of a hundred-weight for 3d., but it could not find purchasers; while, at the same time, in the *bāsār* a bundle weighing only a third of a hundredweight sold at this rate, although consisting only of weeds and coarse grass. The rent alone of the field was 10s. a year, so that the cultivation of *sorgho* was not a profitable undertaking. The Collector, in his report on the subject, was of opinion that the seed was sown at the wrong time of the year, as during the rains a large supply of grass and weeds can be obtained from the land on which the *bhādai* crops stand, merely for the trouble of cutting. In the cold and hot weather, however, a good crop of *sorgho* might command a better price; but even then cattle would probably continue to pick up a coarse food on the *chars* and uncultivated hills which abound in the District. In fact, the setting aside of land merely to grow fodder for cattle is an arrangement which does not at all coincide with the views of native cattle rearers, who laugh at the idea.

FERÆ NATURÆ: MAMMALS.—The following paragraphs have been chiefly condensed from a note on the *feræ naturæ* of the District supplied to me by the Collector, Mr. Lockwood:—'I have only observed two species of monkey in this District, the *langur* (*Presbytis*

entellus) and the *bandar* (*Inuus rhesus*). Both are very local. The former is found only south of the Ganges, and fortunately even there it is rare, for it does a vast amount of damage to the crops. The *bandars* also are found only in a few places, affecting certain localities, from which apparently they never migrate. Year after year officers in camp find them in the same mango groves. At Monkey Island, on the Kábar lake, they are particularly numerous, being venerated by the priests of the Hindu temple. Numbers come out from the jungle on all sides on being called; and the band is headed by a fierce old male, who apparently holds unlimited sway over the others. In the year 1793 a yearly grant of £ was made by Government for the express purpose of feeding the monkeys and lighting the temple on Monkey Island; but in 1852 the grant was discontinued, owing to its being misappropriated by the ruling priests. Bats are common all over the District. The frugivorous bats (*Pteropus*) are caught by the lower classes, and are said to be excellent eating. The long-tailed bat is occasionally seen; and other insectivorous bats are common. They are called *chámgúdrí*, or leather-wings, by the natives. The long-armed bat (*Taphozous longimanus*) is a great pest in record rooms. Among insectivorous mammals deserving notice are the musk-shrews, which occur in extraordinary numbers. The *Tupaia Elliotti* abounds in the Kharakpur hills. It bears so great a resemblance to the common palm squirrel that it long escaped notice.

‘Among carnivora may be mentioned the black bear (*Ursus labiatus*). It is found generally throughout the hilly portion of the District, but is not common now. It is much sought after, both for the sake of the reward offered by Government for its head, and for the excellence of its flesh. The Santáls of the southern hills watch it when it comes to feed on the flowers of the *mahuá*, and, concealed amongst the branches of the tree, shoot it with poisoned arrows. When unmolested it is usually an inoffensive animal. The Indian badger (*Mellivora Indica*) is not uncommon in the District, particularly among the Kharakpur hills. Others are said to be common in the rivers, but I have never seen one. Tigers are not common in this District, as the reward of £2, 10s. od. induces hunters to destroy them, usually by means of traps armed with bows and arrows set in the paths which they frequent. The District is very unfavourable for tiger-shooting, as the jungles are almost interminable, and so thick with under-scrub that the sportsman cannot

proceed on foot with any chance of success, whilst the passage of elephants would be impossible. Leopards are, or at all events were, more common, but the reward given for killing them also makes their pursuit very profitable, and is leading to their extermination. Wild cats are everywhere common, and destroy a vast amount of game. Indeed, were it not for the number of eggs which the game birds lay, they must have long ago become extinct. Almost every hedge of any size contains its jungle cat, ready to spring on any bird that comes near. Hyænas are found in the hills, but, being true nocturnal animals, they are seldom met with ; but some caves, which have been tenanted by them from time immemorial, may be seen. Civets, both *Viverra zibetha* and *V. Malaccensis*, are far from uncommon, and do a vast amount of damage to game birds. I have only noticed the common mongoose (*Herpestes*). It is common everywhere, and, in consequence of its antipathy to snakes, is not molested. It is a great nuisance as a pet. I have never seen the wolf in this District ; but Mr. Crowdy, of Manjhaul factory, tells me that he meets with it occasionally out hunting, but that his fox-hounds will not face it. The wild dog has occasionally been killed among the hills, but it appears to be becoming extinct. The Indian fox is found everywhere.

'The Gangetic porpoise abounds in the river, and is occasionally captured and eaten. Its oil is sold in the *bászár* for preserving leather and other purposes. The *Sciurus palmarum* is the only squirrel which I have seen in the District ; it is common nearly everywhere, and is a pest in fruit gardens. Rats and mice are very common both in the fields and houses. The field rat is eaten by the *Musáhars*, and is considered by them a great delicacy. Porcupines are not uncommon, and are eaten whenever captured by the lower classes. Hares are not uncommon throughout the District, several being generally started during a day's shooting. Wild pigs are found sparingly all over the District in suitable places. Of deer, the *sámbar* stag (*Rusa Aristotelis*) is occasionally killed. The spotted deer (*Axis maculatus*) abounds towards the south, and often invades the cultivated country, to the serious injury of the standing crops. The swamp deer, or *bára singhá* (*Rucervus Duvaucellii*), is not uncommon. Wild buffaloes are occasionally found in the north of the District, in *parganá* Pharkiyá.'

BIRDS.—Mr. Lockwood writes concerning the birds of the District :—' I have only noticed three species of vulture,—the common

vulture (*Gyps Bengalensis*), the black vulture (*Otogyps calvus*), and the Egyptian or scavenger vulture. All feed on carrion, and are for this reason extremely useful. The natives look on them with considerable abhorrence, and will often pull a house down if a vulture alights on it. Of the falcons there may be mentioned the peregrine, a cold-weather visitant, and the *saker* (*Falco sacer*). The Maharájá Sir Jai Mangal Sinh, K.C.S.I., is the only native gentleman that I have seen who keeps up the old Indian sport of hawking. Of *Accipitrinæ*, the sparrow-hawk is the only species I have noticed. Monghyr is rich in fishing eagles. The osprey abounds near the Ganges, and in the vicinity of all the large marshes north of that river. The white-tailed eagle is equally common, and breeds in this District. Harriers abound during the cold season, and may be seen hawking over every field in search of small birds and lizards. The ortolan or short-toed lark (*Calandrella brachydactyla*) and quail are especially marked out as quarry by all the hawks. Owls are not very numerous, but the rock owl is found here.

‘Of *Insectorres*, swallows, martins, and swifts are numerous, and the European swallow abounds during the cold season. The wire-tailed swallow may occasionally be seen in the Kharakpur hills; and on one occasion I noticed the spine-tailed swift there. Night-jars are found in localities similar to those they frequent in Europe. The common bee-eaters (*Merops viridis* and *M. Philippensis*) are found at certain seasons everywhere. Other species are rare. The beautiful Indian roller (*Coracias*), the jay of Europeans, abounds. It is one of the most familiar birds in this country. Its feathers are much prized as ornaments, and are taken home by anglers under the impression that they will make fine salmon flies, but the beautiful cobalt blue turns pink in water. Kingfishers are not so common here as in Bengal. The only species I have noticed are the *Halcyon fuscus*, *H. leucocephalus*, *Alcedo Bengalensis*, and the *Ceryle rudis*, which during the cold weather may be seen hovering over every tank in search of fish. The feathers of *H. fuscus*, which is insectivorous, are in great request for ornaments, and the bird-catchers snare them by thousands by means of a small net and a decoy bird. I have seen a successful party on their way to Calcutta with several thousand skins. In London, I was told by an eminent bird-stuffer that a good skin of the Indian roller or of *H. fuscus* was worth about five shillings for ladies’ hats. Hornbills are not uncommon. The Malabar pied hornbill (*Hydrocissa coronata*) has been met with in the

Kharakpur hills. Parakeets are common everywhere, and they do a considerable amount of damage to the crops. They are favourite cage birds. I have not noticed any great variety of woodpeckers in the District. By far the most common species is the golden-backed woodpecker (*Brachypternus aurantius*). Barbets are common everywhere. The species named *Megalaima viridis* is called the copper-smith, from its call resembling the noise made by smiths in making copper vessels. Although India is the headquarters of the cuckoo family, I have not observed many species here. The European cuckoo is not uncommon during the cold weather, but it returns to the hills during the breeding season, so that its familiar call is never heard. The pied cuckoo is heard everywhere during the rains, and the hawk cuckoo and *koel* abound at all seasons. The former is known as the hot-weather bird, as its shrill call ushers in that season. The latter seems to take possession of every crow's nest it can find to deposit its eggs in; at least, nearly every crow's nest I have inspected has had a *koel's* egg in it. *Malkohas* are occasionally seen. *Konkals* (*Centropus*) or crow-pheasants are very common, and the *sirkir* (*Taccocua*) are met with in the Kharakpur hills. Honey-suckers, or humming-birds, as they are generally called by Europeans, are common everywhere. In every garden where the Spanish jasmin (*Plumeria* or *Hamelia patens*) is found, several species may be seen inserting their little beaks into the pipe-like flowers to extract the nectar. Nut-hatches are not uncommon, and are met with all over the District during the cold weather. Hoopoes are found in every garden. *U. nigripennis* built its nest and reared its young in an old building in the jail last spring. This bird is supposed to have been a great favourite with Solomon, and is accordingly not molested by Muhammadans. One or two species of shrike are common. *Lanius cristatus* is the first migrant to appear at the commencement of the cold season. I always note the day of its arrival, as people in England note the swallow's arrival in spring. All the three Indian species of cuckoo shrike (*Volvocivora*) are found in the District. The beautiful mini-vets are cold-weather visitants, and may be seen in flocks searching for insects in almost every grove. The Drongo shrike or king crow is seen everywhere. The family of *Muscicapidæ* is fairly represented. The Paradise fly-catcher (*Tchitreia paradisi*) is not uncommon in the well-wooded country to the north of the District. The curious transition of this species from chestnut to white is, so far as I know, unique among birds. The theory that white is the nuptial plumage,

cannot, I think, be correct, as I have seen the white male pair with the chestnut female, and *vice versâ*, during the breeding season. Fantails (*Leucocerca*) are not uncommon in the woods. The *Merulinæ* are badly represented. The orange-headed ground thrush (*Geocichla citrina*) may occasionally be seen in the Government gardens during the cold weather, and the blue rock thrush (*Petrocosyphus cyaneus*) appears also at the same season. Both retire northwards to breed. The babbling thrushes (*Timalinæ*) are fairly represented here. The *kachbachiya* or *sáthbhái* of the natives (*Malacocercus terricolor*) is seen in every hedge and garden; about seven are usually seen together, hence the name "seven brothers." Their bright-blue eggs are characteristic of the genus. Other species occur in the District, but they are not a very interesting family. The bulbuls or short-legged thrushes are not so numerous as in other parts of Bengal; they are caught by the *shikdris* on account of their plumage, and for fighting. The green *Phyllornis* is abundant. It frequents mango trees, which towards Kharakpur are much infested by the *Ioranthus*. The flowers of this parasite appear during the cold season, and are rich in nectar, on which the bird feeds. The little white-winged green bulbul (*Iora typhia*) is also very common in the cold weather, and, I think, should be properly classed with the tits, as its note, size, and habits are quite those of the English blue titmouse. Orioles abound in every grove. When they put on their nuptial plumage in the spring, their beauty cannot be surpassed, and their skins are in much request. One species comes very near the *Auricus* of Europe, but has a longer black mark behind the eyes. Its nest is beautifully compact. Of *Ruticillæ*, the Indian redstart is common everywhere during the cold weather. The ruby-throat is occasionally seen in the *rabi* fields; and the blue-throat (*Cyanecula suecica*), so like the European bird, is equally common. Reed-warblers abound in suitable places. On the Kábar lake they are particularly numerous. Among the sub-family *Drymoicinæ*, the Indian tailor-bird is abundant, being found in almost every hedge. Its nest is a model of ingenuity and beauty. The weaver-bird, or *baya*, is generally miscalled the tailor-bird by Europeans. The minute *Phylloscopinæ*, or tree-warblers, are well represented in the cold weather. The *Reguloides proregulus*, the Dalmatian regulus, so rare in Europe, is not uncommon here. The wagtails are all migrants, leaving us before their pairing season in the spring, and returning at the first approach of the cold weather.

Their arrival is always welcome, as it denotes that the thermometer will fall below 80° at sunrise. They breed in Bhutan and across the Himálayas. The field wagtails are amongst the most numerous of the cold-weather birds. The same may be said of their cousins the pipits. Of the tits, so familiar in Europe and in the Himálayas, I have only noticed the grey titmouse (*Parus cinereus*). This little bird occasionally appears during the cold season, and its form and note are hardly distinguishable from the British oxeye. Of the family Corvidæ we have several species. The corby and the common crow abound everywhere. The Indian magpie is one of our most familiar birds. The starlings are well represented by the *máinas*, several species of which remain with us all the year round. The European starling is common during the cold season, coming in immense flocks, which are nearly always joined by the *máinas*. The bank *máinas* are also abundant along the Ganges, breeding on its banks. It is the only bird that I know, which, breeding in holes of banks or trees, lays coloured eggs, which are of a bright green; whilst those of the owls, kingfishers, woodpeckers, barbets, and others which have similar nests, are invariably white. The Fringillidæ are not so well represented as we should expect to find them, considering the abundance of food suited to them ever present in Behar. The weaver-bird (*Ploceus baya*) is, however, common, and its curious nests may be seen in nearly every village. The *munias*, or Amadavads of Europeans, are found in suitable places. They are known here as *lúls*; and thousands are yearly captured for cage birds, as their pugnacity towards each other in confinement appears to amuse the natives who keep them. The Indian house-sparrow, only distinguishable from its European cousin to the scientific eye, is common everywhere. The rose finch, or *tuti*, is not uncommon during the cold weather. Its beauty has marked it for captivity. The curious little finch-lark (*Pyrrhulauda grisea*) is common in the fields; and the skylark also abounds. In *parganá* Pharkiyá, in the north of the District, it is particularly common. The green pigeon (*Crocopus phœnicopterus*) is largely met with, its chief food being the fig of the banyan tree.* The upper-class natives consider them, as indeed they are, excellent eating. The blue rock pigeon is equally common, and although ordinarily rather wild, occasionally enters verandas to build its nest on the cornices. Turtle-doves are found in almost every grove. The beautiful ground-dove, with emerald-like wings, is also sometimes seen.

Among the Rasores, the peacock is found throughout the hill jungles in the south, particularly in *parganá Chakál*. At Bhimbándh, in the Kharakpur hills, it is very common, and many may be seen in the early morning going out to feed. As it is sacred to Kártik, the younger son of Mahádeo, or the great god, it is rarely molested by Hindus. The jungle-fowl (*Gallus ferrugineus*), the progenitor of the domestic fowl, is found in the same jungles with the peacock. The exquisite shape of its hackles, when compared with those of the domestic fowl, makes them very valuable for salmon flies. This fact has escaped the notice of many professional fly-tiers, who are only acquainted with the wax-spotted hackles of the Madras bird (*Gallus sonnerati*). The red spur-fowl (*Galloperdex spadiceus*) is occasionally seen. Of partridges, the grey species is abundant in scrub jungle south of the Ganges. The black partridge, or francolin, affects the grass prairies in the north of the District; and the marsh or *kyat* partridge is found in the low lands in *parganá Pharkiyá*. The common quail abounds in the *rabí* crops. The black-breasted quail, which breeds in this District, is not nearly so abundant as the common quail, which migrates in the spring to breed beyond the Himálayas, and consequently has a better chance in the struggle for existence than it would have here, where so many four-footed, flying, and creeping enemies, in the shape of cats, foxes, hawks, and snakes, are ever ready to devour it and its eggs. Bustards are rarely seen.

The Cursorcs are represented by the courier plover, which is found chiefly on the alluvial *didrá* lands bordering the Ganges. Two species of swallow plover, the pratincole of Europe, are common, and may be seen in large flocks hawking for insects on the banks of rivers. Other species of plover are common,—the golden plover during the cold weather, and the spur-winged plover at all seasons. The Norfolk plover, so rare in England, is particularly common among the rocks here. Cranes (*Grus Antigone* and *G. cinerea*) come during the cold season, and are much pursued by *shikáris*. When a bird is winged, it is seldom killed, but is sold in its wounded state to native gentlemen, who keep it, if it survives the injury, as a pet in their courtyards. Many tame birds thus acquired may be met with. On one occasion I found the woodcock; it had evidently lost its way, or had been blown here from the Himálayas. Snipe are not so common in Monghyr as in other parts of Bengal. The English and pintail species (*Gallinago stenura*) appear to be nearly equally distributed. The painted snipe and jack snipe are rare. Godwits

appear in vast flocks on the marshes in *paraganá* Pharkiyá during the cold season; and the graceful avocet may be occasionally seen along the banks of the Ganges. Curlews and whimbrels (*Numenius phaeopus*) are found in the Pharkiyá marshes. Among the stints and sand-pipers met with in this District, may be mentioned the ruff (*Philomachus pugnax*), the little stint (*Tringa minuta*), the spotted, green, and common sand-pipers. These appear in vast numbers during the cold season, whilst the green-shank and red-shank are found on every marsh. The elegant stilt (*Himantopus candidus*), so rare in Europe, is abundant here during the cold season. Nearly all the wading family are migrants, retiring beyond the Himálayas to breed. Both the Indian jacanas (*Metopidius*) abound in the marshes, to the north of the District, where they remain all the year round. The coots are well represented also in the marshes; and conspicuous amongst the family is the purple species, found on every reedy swamp. Several species of rail also are found in the same localities, but they are not so common or abundant as the coots and water-hens. Storks are found throughout the District. The adjutant is only occasionally seen; but the white-necked stork or beef-steak bird (*Ciconia leucocephala*) is very common during the winter months. The white stork of Europe, so much cherished in Germany, is also at times met with. The European heron is found throughout the District, but it does not breed in company as in England. The purple heron of Europe is also abundant; and I have met with several of its breeding-places in the vast reed beds towards the north. Egrets, or paddy birds, as they are familiarly called, abound during the rainy season, when they put on their nuptial plumage. They are very graceful birds, and their feathers are in much request, as they can be sold in Calcutta at about a guinea an ounce. Bitterns do not appear to be so common here as in other parts of Bengal; but the allied night heron of Europe (*Nycticorax griseus*) abounds, and its familiar call may be heard on still evenings as it passes to its feeding-grounds. The spoonbill is occasionally seen in the Pharkiyá marshes; and the shell ibis (*Anastomus oscitans*) is most abundant. There are several species of ibis, amongst which the sacred ibis of Europe and Africa is met with in great flocks.

The marshes in the north of the District form the home of myriads of geese and ducks during the cold season. I have observed the following species:—The *naktar* or grey goose (*Anser cinereus*), the barred-headed goose (*A. Indicus*), the white-headed

goose-rail (*Nettapus Coromandelianus*), the whistling teal (*Dendrocygna*), the shieldrake (*Tadorna vulpanser*), the ruddy shieldrake (*Casarca rutila*), the shoveller (*Spatula clypeata*), the pink-headed duck (*Anas caryophyllacea*), the gadwall (*Chaulelasmus streperus*), the pintail duck (*Dafila acuta*), the widgeon (*Mareca Penelope*), the teal (*Querquedula crecca*), the gargany (*Querquedula circia*), the red-crested pochard (*Branta rufina*), the red-headed pochard (*Aythya ferina*), the ferruginous duck (*Aythya nyroca*), and the tufted duck (*Fuligula cristata*). The last twelve are found in England. Grebes (*Podiceps*) are found on most of the marshes, where also terns abound. The whiskered tern, an uncommon bird in England, and the gull-billed tern, are common here. The curious Indian skimmer (*Rhynchops albicollis*), with its razor-like lower mandible much longer than the upper, may be seen skimming over the Ganges everywhere; and only on one occasion, when I saw a small fish in its beak, did I ever notice that this bird takes any food except water and air. Pelicans, or river sheep, as the natives call them, are seen occasionally swimming in the rivers and marshes, or soaring far overhead. They are much detested by fishermen, according to the old principle, that two of a trade never agree; indeed, the fishermen have some cause for disliking them, for a flock of pelicans, when they alight, form a regular line, and swim along, devouring every fish which comes in their way. Cormorants are common in suitable localities; and the nearly allied Indian snake-bird (*Plotus melanogaster*) pays dearly for the beauty of its scapular feathers, for the *shikáris* during the breeding season pursue it as eagerly as they do the egrets.

REPTILES.—‘Crocodiles abound in the north of the District. Marsh crocodiles (*Crocodylus palustris*), the alligators of Europeans, and the *magars* or *bochars* of the natives, are very numerous in the Tiljágá river, and during the rains in the neighbouring inundated marshes. One hundred individuals of all sizes may be counted during the cold season basking in the sun along a single reach of the river. With them may be seen a few *gharials* and many turtles, all apparently living in perfect harmony together, and finding food in the swarms of fish which live around them. The *bochars* and turtles, if not the *gharials*, also feed on the dead bodies of men and animals when they can get them. The *gharial* (*Gavialis Gangeticus*) chiefly affects the Ganges, where the *bochar* is almost unknown, and at sunrise several may be seen on every sandbank. They are

said to be exclusively fish-eaters. Small specimens are not unfrequently caught in the fishermen's nets, and are eaten by the lower classes. Fresh-water turtles abound. The carapace is invariably used as a hod for carrying mortar. The most remarkable lizards in the District are the Varanidæ or *gosámps*, the iguanas of Europeans; three species are found,—*Hydrocaurus Salvator*, the monitor (*Varana dracæna*), and *Empagusia flavescens*. The monitor, which may be distinguished by the position of the nostrils half-way between the lip and the eye, abounds everywhere, and is supposed, without reason, to be very venomous. Many species of small tree-lizards, among which is the dreaded though perfectly harmless 'blood-sucker,' are found; and the chameleon is not uncommon. When captured, the chameleon is always kept for sale. Among other thick-tongued lizards may be mentioned the wall *gecko*, which abounds in every house.

'SNAKES are numerous in Monghyr District. The rock snake (*Python moluris*), the boa-constrictor of Europeans, is found on the hills. The skin of one individual, ten feet long, lately killed in *parganá* Abhaipur, is exhibited in the Monghyr museum. The cobra is by far the most common snake. The Monghyr municipality, during the past two years, has given rewards for 1000 cobras alleged to have been killed within the precincts of the town, whilst the Jamálpur municipality, six miles distant, has paid for a nearly equal number. Notwithstanding this, their numbers do not appear sensibly to have decreased; but it is satisfactory to learn that deaths from snake-bite are now rare within the towns, compared with what they were a few years ago. Next to the cobra, the *karait* (*Bungarus cœruleus*) abounds, but is not nearly so often met with as the former. *Bungarus fasciatus* and *Daboia Russellii* are both very rare here, only one specimen of each having been brought in for reward. Vipers are occasionally found. The *sakrá* (*Lycodon aulularia*), a pretty little harmless snake, declared by the natives to be very deadly, abounds, as its specific name implies, in dwelling-houses and other buildings. Another snake, rare in museums, is not uncommon here,—*Ferrania Sibboldii*. The little *Typhlops*, which resembles the earthworm, is common. It is known as 'the *thiliá sámp*, the meaning of which is said to be that the poisonous effects of its bite can only be removed by the speedy application of an earthen vessel (*thiliá*) full of oil.'

The cost of keeping down wild beasts, as represented by rewards

paid by Government, was £236, 2s. od. in 1866-67; £254, 18s. od. in 1867-68; and £193, 10s. od. in 1868-69. The deaths caused by wild beasts were 108, 91, and 179 for these three years respectively; and from snake-bites, 37, 46, and 127.

POPULATION.—The earliest attempt made towards an enumeration of the people of Monghyr was in the year 1802, when a *khānā sumārī* or house census was commenced. From this it was intended to derive an estimate of the population, by multiplying by a certain number, assumed to represent the average number of inmates in each house. It does not now appear how far this scheme was carried out; but Dr. Buchanan Hamilton, in 1811, says of the returns of two police divisions which he had been able to find, that they satisfied him that he had nothing to regret in the loss of the others. Dr. Buchanan Hamilton himself made an estimate of each of the police divisions in the whole District of Bhāgalpur, in which Monghyr was then included. These old divisions unfortunately do not coincide with the boundaries of Monghyr in any direction; but by taking only those which are entirely included in the present District, some figures of statistical value may be obtained. These police divisions are:—(1) Gogri, with an area of 788 square miles, and a population of 150,700; Monghyr, 113 square miles, and a population of 45,300; Sūrajgarha, 103 square miles, and a population of 39,600; Mallahpur, 697 square miles, and a population of 150,000; and Tārāpur, 643 square miles, and a population of 179,800: total area, 2344 square miles, and total population, 571,400, of whom 464,775 are stated to be Hindus, and 106,625 Musalmāns. The population at the present day for the same area is about double this estimate. But considering that land reclamation has been largely carried on both on the north and south of the Ganges, and that the number of the people is known to have increased in consequence of immigration and much prosperity combined, it is very probable that Dr. Buchanan Hamilton's estimate was, at the time it was made, at least approximately correct. After this time there was no systematic effort to enumerate the people, even in part, till 1869. The rural police frequently sent in returns of the number of houses in the villages to which they were attached, on which rough estimates were founded. In 1869 this method gave 843,775 souls in the District, five persons being allowed to each household, and was declared by the Collector to be 'too high a computation.' In the same year an experimental Census was carried out in the five towns of Monghyr, Jamālpur,

Jainúf, Shaikhpurá, and Sekandrá, with the view of testing the capacity of existing agencies for the larger measure of a complete Census then proposed. The results were :—Monghyr—males 26,450, females 27,531; total 53,981. Jamálpur—males 4315, females 3062; total 7377. Jamúf—males 2374, females 2245; total 4619. Shaikhpurá—males 4342, females 4474; total 8816. Sekandrá—males 1593, females 1376; total 2969. Total population of five towns, 77,762. The Census of 1872 gave a total population of 90,397. The results of this Census, as bearing on the towns, will be given in greater detail on a subsequent page.

CENSUS OF 1872.—The first complete Census of the whole District was carried out between the 15th and 25th of February 1872, the enumeration of the headquarters town being made on the night of the 22d. The operation commenced with the preparation, in 1870 and the beginning of 1871, of lists of villages, based on the Survey records, and subsequently tested by the principal officers of police at the various police centres. The Collector considered that this testing was complete and satisfactory, from the fact that 4036 villages were visited, resulting in 568 corrections in the original lists. The village *patwáris* were, as far as possible, to form the enumerating agency. The Collector, Mr. Barlow, reported that 'they did their work very fairly on the whole, and in many cases exceptionally well; and, save in some instances in which European planters have, without sufficient reason, I think, grumbled at the *patwáris* being taken away from their regular work, I have heard no general complaint made on the score of their services having been utilized for the Census.' The results disclosed a total population of 1,812,986 souls, dwelling in 2457 villages and 328,174 houses; the average pressure of population on the soil being 463 persons per square mile. As to the accuracy of the enumeration, the Collector writes: 'I am prepared to believe that success in this direction has been obtained to a greater degree than could have been looked for, and to all practical purposes sufficient for the object in view. My reason for so thinking is the extraordinary correctness with which the numbering of the houses in the first instance was done, as ascertained by ourselves; and the fact that, while the Census was going on, both my subdivisional officers carried on a check inquiry over the enumeration in selected areas, with the result of finding that the enumeration was practically correct in every instance.'

ABSTRACT OF THE POPULATION, AREA, ETC. OF EACH SUBDIVISION AND POLICE CIRCLE (*thānd*) IN
MONGHYR DISTRICT, 1872.

SUBDIVISION.	POLICE CIRCLE.	Area in Square Miles.	Number of Villages, <i>Mauzas</i> , or Townships.	Number of Houses.	Total Population.	Averages according to the Census Report.				
						Persons per Square Mile.	Villages, <i>Mauzas</i> , or Townships per Square Mile.	Persons per Village, <i>Mauza</i> , or Township.	Houses per Square Mile.	Persons per House.
HEADQUARTERS.	Monghyr.	170	129	27,438	141,188	831	76	1094	161	5'1
	Sūrajgarha.	310	243	28,573	154,004	497	78	634	92	5'4
	Kharakpur.	361	298	25,987	140,139	388	83	470	72	5'4
	Gogri.	719	314	51,770	315,653	439	44	1005	72	6'1
	<i>Subdivisional total.</i>	1560	984	133,768	759,984	481	63	763	86	5'6
BEGU SARAI.	Tegra.	293	262	37,262	196,663	671	89	751	127	5'3
	Balyā, or Begu Sarāi.	476	441	59,653	341,062	717	93	773	125	5'7
	<i>Subdivisional total.</i>	769	703	96,915	537,725	699	91	765	126	5'5
JAMUI.	Shaikhpurā.	344	323	38,734	198,779	578	94	615	113	5'1
	Sikandrā.	233	201	20,497	109,759	471	86	546	88	5'4
	Jamui.	533	218	24,728	137,117	257	41	629	46	5'5
	Chakāi.	474	28	13,622	78,622	166	66	2808	89	5'8
	<i>Subdivisional total.</i>	1584	770	97,491	524,277	331	49	681	62	5'4
DISTRICT TOTAL.		3913	2457	328,174	1,812,986	463	61	738	84	5'5

The most densely populated parts of the District are the police division lying around the headquarters Station, and the trans-Gangetic police divisions of Begu Saráí or Baliyá and Tegrá, in which the population is 831, 671, and 717 to the square mile, respectively. The north-western tracts, which produce the fine so-called Patná rice, are also well peopled, the average population to the square mile ranging from 471 in police division Sikandrā to 578 in Shaikhpurá. The partly plain and partly hilly Kharakpur division, with 388 to the square mile, begins to show a considerable diminution, which reaches its lowest point in the jungle and waste lands of Chakáí, with 166 souls to the square mile.

The table on the preceding page illustrates the density of the population in each police circle and Subdivision, with the number of villages, houses, pressure per square mile, etc. in each. The table is produced *verbatim* from the Census Report of 1872.

POPULATION CLASSIFIED ACCORDING TO SEX AND AGE.—The total population of Monghyr District consists of 897,074 males, and 915,912 females; total, 1,812,986. The proportion of males to the total population is 49·5 per cent., and the average density of the population 463·32 per square mile. Classified according to age, the Census gives the following results:—Hindus—under twelve years of age, males 306,166, females 268,612; above twelve years, males 494,919, females 543,849. Muhamínadans—under twelve years of age, males 33,302, females 29,064; above twelve years, males 54,076, females 65,827. Buddhists—under twelve years of age, males 6, females 3; above twelve years, males 13, females 12. Christians—under twelve years of age, males 166, females 186; above twelve years, males 460, females 330. Other denominations not separately classified, consisting of aboriginal tribes—under twelve years of age, males 3451, females 3269; above twelve years, males 4515, females 4760. Population of all religions—under twelve years of age, males 343,091, females 301,134; above twelve years, males 553,983, females 614,778. The small proportion of female children to male children, and the excessive proportion of females above twelve years, is believed to be due to the fact that girls are considered to arrive at womanhood at an earlier age than boys reach manhood, and are classified as adults accordingly. The proportion of the sexes of all ages is probably correct. The number of infirms in Monghyr District is returned as follows in the Census Report:—*Insances*—males 103, females 25; total 128, or ·0071 per cent. of the popula-

tion. Idiots—males 153, females 40: total 193, or '0106 per cent. of the population. Deaf and dumb—males 958, females 347, total 1305, or '0719 per cent. of the population. Blind—males 1183, females 788; total 1971, or '1087 per cent. of the population. Lepers—males 479, females 70; total 549, or '0303 per cent. of the population. The number of females as compared with that of males seems suspiciously small. Total infirms, 4146, or '2287 per cent. of the population.

The figures given in the District Census Compilation, to show the occupations of the people, are omitted here, as they fail to stand the test of statistical criticism.

ETHNICAL DIVISION OF THE PEOPLE.—The population of Monghyr District is in origin very composite, although less so than that of its sister District of Bhágalpur, which it resembles in so many particulars. The lowest strata of the people, including even those who have adopted Hinduism in its entirety, are unquestionably of aboriginal descent of more or less purity. These tribes are divided into two distinct races, which may be distinguished as southern and northern,—the first being related to the black peoples who inhabit the valleys of the Vindhyan range and its outlying hills; and the second connected with the Hímálaya races, and partly consisting of the peoples pushed down from North-western Hindustán by the inflow of the Aryans from beyond the Indus. The former are most numerous, as compared with the area inhabited, on the Chakál plateau in the south of the District, where the Santáls, Bhuiyás, Naiyás, and Cháins predominate. So much has been written concerning these tribes and their inter-relations, that it is unnecessary to do more than refer to them here. Conspicuous for their numbers amongst the northern aboriginal races are the Musáhars and Dosádhs, who together number 211,897 souls. The Musáhars are generally considered to be a branch, which has outgrown its parent stem, of the once important Thárú people, who ruled in Northern Oudh and the country eastward to the Gandak, whence they were driven by the great Aryan movement, usually known as the Rájput invasion. How they entered India is now unknown; but they are supposed, from their likeness to the eastern hill-men, to have come from the north-east. Dr. Buchanan Hamilton says of them: 'They retain in their features strong marks of a Chinese or Tartar origin.' The connections of the Dosádhs are involved in still greater uncertainty. They have been by some authorities grouped with the Chámárs, whose origin

is itself unknown ; but with more probability with the people known as Chandáls in Lower Bengal, the supposed representatives of its oldest inhabitants, the autocthones of the delta. Being the most ancient people, they lie at the farthest end of the routes along which the march of peoples from both the north-west and north-east has directed itself. They are now completely absorbed in the great Hindu and Musalmán communities, their language being also dead, except for a few words preserved in the village *patois* of Behar and Bengal. There are similar reasons for doubting the pure descent of the Monghyr Rájputs, particularly those in the north of the Ganges, mentioned in my Account of Bhágampur. Amongst agricultural castes, a very remarkable one is the Koers, who are distinguished by their numbers and the respect in which they are held by the higher castes. That they are of pure Aryan blood is very doubtful, but it seems equally unlikely that they are connected with either of the aboriginal races. The Dhánuks, numbering 113,524; the Káhárs, 40,703; the Tántís, 86,202; the Beldárs, 16,676; as well as the fishing castes, probably owe much to aboriginal elements.

Mr. C. F. Magrath's District Census Compilation for Monghyr thus classifies the ethnical divisions of the people. The list of Hindu castes will be reproduced on a subsequent page, but arranged in a different order from that given here, according to the rank which each holds in social esteem :—

NAME OF NATIONALITY, TRIBE, OR CASTE.	Number.	NAME OF NATIONALITY, TRIBE, OR CASTE.	Number.
I.—NON-ASIATICS.		<i>Americans—</i>	
<i>Europeans—</i>		West Indian, . . .	2
English,	317	Unspecified, . . .	5
Irish,	82	Total, . . .	7
Scotch,	67	TOTAL OF NON-ASIATICS,	517
Welsh,	1	II.—MIXED RACES.	
French,	20	Eurasian,	405
German,	4	III.—ASIATICS.	
Dutch,	6	<i>A.—Other than Natives of</i>	
Italian,	1	<i>India and British Burmah.</i>	
Greek,	1	Armenian,	26
Pole,	1	Jew,	6
Russian,	1	Total, . . .	32
Unspecified, . . .	9		
Total, . . .	510		

NAME OF NATIONALITY, TRIBE, OR CASTE.	Number.	NAME OF NATIONALITY, TRIBE, OR CASTE.	Number.
<i>B.—Natives of India and British Burmah.</i>		(iii.) TRADING CASTES.	
1. <i>Aboriginal Tribes.</i>		Adhbaniyá,	1,512
Bákkho,	26	Agarwála,	1,011
Bhar,	2	Agráhrí,	113
Dhángar,	18	Bais Baniyá,	8
Kanjhar,	55	Baniyá,	27,451
Khariya,	21	Barnawár,	5,749
Kol,	1,934	Bohra,	21
Naiyá,	5,492	Gurír,	1,643
Nat,	167	Jamanpuri,	78
Santál,	13,957	K malkalá,	26
Total,	21,672	Kasarwáni,	2,973
2. <i>Semi-Hinduized Aboriginals.</i>		Kasaudhan,	439
Arakh and Báheliá,	580	Kath Baniyá,	512
Bágdí,	19	Khatrí,	356
Bárl,	1,862	Máhuri,	2,209
Báuri,	4	Márwári,	376
Bhuiyá,	6,936	Nuniyár,	218
Bind,	13,186	Poddár,	19
Cháin,	5,889	Rastogi,	510
Chámár,	46,126	Rauniyár,	1,008
Dom,	10,769	Saráwak,	34
Dosádh,	99,312	Sindúriyá,	1,247
Gangauntá,	8,757	Total,	47,493
Hárl,	667	(iv.) PASTORAL CASTES.	
Maheli,	375	Gareri,	4,471
Markandi,	5,780	Goálá,	197,569
Mihtar,	1,658	Ját,	107
Mukeri,	36	Total,	202,147
Musáhar,	112,585	(v.) CASTES ENGAGED IN PREPARING COOKED FOOD.	
Pási,	12,362	Halwái,	14,918
Rájwár,	114	Kándú,	52,259
Total,	327,017	Total,	67,177
3. <i>Hindus.</i>		(vi.) AGRICULTURAL CASTES.	
(i.) SUPERIOR CASTES.		Báruí and Támbuli,	12,848
Bráhmañ,	43,402	Kaibartta,	55
Rájput,	46,836	Koerí,	77,741
Ghátwál,	3,570	Kurmi,	33,029
Total,	93,808	Máli,	5,360
(ii.) INTERMEDIATE CASTES.		Nágar,	7,876
Bábhán,	160,973	Sadgop,	37
Baidiyá,	14	Total,	136,946
Bhát,	1,705		
Kathak,	32		
Káyasth,	20,462		
Total,	183,186		

NAME OF NATIONALITY, TRIBE, OR CASTE.	Number	NAME OF NATIONALITY, TRIBE, OR CASTE.	Number
(vii.) CASTES ENGAGED CHIEFLY IN PERSONAL SERVICE.		(xii.) BOATING AND FISHING CASTES.	
Dhánuk,	113,524	Banpar,	603
Dhobá,	15,772	Bathuá,	57
Hajjám or Nápit,	27,020	Gonri,	13,441
Káhar,	40,703	Kaláwant,	37
Total,	197,019	Keut,	3,101
		Málá,	13,996
(viii.) ARTISAN CASTES.		Muriyári,	609
Barhi,	29,152	Surahiyá,	7,976
Bhaskár,	57	Tior,	18,014
Chhipi,	21	Total,	57,834
Churihári,	3		
Darzi,	5	(xiii.) DANCER, MUSICIAN, BEGGAR, AND VAGABOND CASTES.	
Kánári and Thatherá,	3,421	Dhekwhá,	237
Kumár,	20,361	Dharhi,	5,108
Láheri,	1,995	Galgaliyá,	12
Lohár,	7,179	Kheltá,	42
Sonár,	13,348	Kuririya,	6
Sunri,	26,703	Pawariya,	56
Teli,	52,765	Rámjáni,	15
Total,	155,010	Total,	5,470
(ix.) WEAVER CASTES			
Benauidyá,	46	(xiv.) PERSONS ENUME- RATED BY NATION- ALITY ONLY.	
Dhaniyá,	773	Uriyá,	5
Jogi,	246	Madrásí,	1
Joláhá,	77	Total,	6
Patuá,	480		
Tánti,	86,202	(xv.) PERSONS OF UNKNOWN OR UNSPECIFIED CASTES,	
Total,	87,824		8,762
(x.) LABOURING CASTES.		GRAND TOTAL OF HINDUS,	
Bátar,	7		1,275,417
Beldár,	16,676	4. Persons of Hindu Origin not recognising Caste.	
Korá,	3,301	Aghori,	250
Nuniyá,	9,218	Atith,	444
Pairagh or Parghu,	979	Vaishnav,	3,273
Total,	30,181	Kabirpanthi,	21
(xi.) CASTES ENGAGED IN SELLING FISH AND VEGETABLES.			
Kiwáni,	54		
Khatik,	612		
Turáhi,	1,832		
Total,	2,548		

NAME OF NATIONALITY, TRIBE, OR CASTE.	Number.	NAME OF NATIONALITY, TRIBE, OR CASTE.	Number.
<i>4. Persons of Hindu Origin not recognising Caste—contd.</i>		<i>5. Muhammadans—contd.</i>	
Nánaksháhl,	109	Sayyid,	5,467
Sanyásl,	1,356	Shaikh,	39,557
Suthrásháhl,	10	Unspecified,	130,447
Native Christians,	194	Total,	182,269
Total, .	5,657	TOTAL OF NATIVES OF INDIA,	1,812,032
<i>5. Muhammadans.</i>		TOTAL OF ASIATICS, .	1,812,064
Mughul,	556	GRAND TOTAL, .	1,812,986
Pathán,	6,242		

ABORIGINAL AND HILL TRIBES.—The aboriginal and hill tribes met with in Monghyr District are the Bákkho, Bhar, Dhángar, Kanjhar, Khariyá, Kol, Naiyá, Nat, Santál. Their several numbers are given in the foregoing table,—the total number as ascertained by the Census of 1872, being 21,672. The semi-Hinduized aborigines, numbering 327,017 souls, will be again referred to on a subsequent page, classified in the list of the Hindu castes. The aboriginal tribes chiefly inhabit the jungles and hills of the southern *pargands* of the District.

EMIGRATION AND IMMIGRATION take place only to a small degree in Monghyr. Perhaps fifty persons in each year go to Assam, the West Indian Islands, and Mauritius. The internal movements of the people, and the comings and goings of temporary immigrants and emigrants, are more noticeable. Thousands of harvest-men yearly cross from the *rabi* tracts north of the Ganges in December, to cut the rice of *pargands* Maldah, Bisthazárl, Jamút, and Kharakpur, returning in the following month with their share, usually one-sixteenth, of the grain they have cut. When the *rabi* crops of *pargands* Pharkiyá, Bhúsárl, and Naipur ripen in April, the labourers of South Monghyr cross the river to assist in reaping it, and in their turn bring back their wages in kind. In 1873 the Collector gave the following account of a religious pilgrimage that he met with as it passed through his jurisdiction :—‘ In the month of March, whilst I was in camp at Goraghát, I counted in one line ninety bullock-carts, each containing five or six women or children, returning from a pilgrimage to Párasnáth in Hazárlbágh. The pilgrims told me they

came from the country about Agra, and that by the time they got home six months would have been spent in the pilgrimage. They appear to have some hidden dislike to the railway; but they said they did not use it in consequence of the trains not suiting as regards time. They stated that Rs. 20,000 was the estimated expenditure of the party, numbering nearly one thousand persons.' In the report of the Collector of Bógrá, written at the same time, there is the following reference to Monghyr emigrants in that eastern District:—'The other day I noticed three up-country men who said that they came from Monghyr; that they had been many year in *samindári* service here; and that there were no less than two hundred Monghyr men within twenty miles of them. All of these, he said, had left their families at Monghyr. My informant said that he had been home eight or nine times. On my asking him why he had left home, he said that all the best lands in Monghyr were taken up by indigo.'

HINDU CASTES.—There is very little difference between the castes and sub-castes of Monghyr and of Bhágalpur. In the Statistical Account of the latter District, I have gone into the origin, relations, and subdivisions of castes at considerable length. On the present occasion I only give their chief characteristics and employments in the District of Monghyr, with their numbers and the parts of the District in which each is most numerous. They are also arranged as far as possible in the order in which they rank in public esteem.

HIGH CASTES.—The following seven hold the first position:—
(1) Bráhmans; members of the sacred caste, though not necessarily of the priesthood; many are landholders, and a larger number are clerks in Government or private offices. In this District, as in Bhágalpur, they have monopolized all the best official appointments. The Maithila Bráhmans are the most numerous, and in nine cases out of ten are the officiating priests of Hindu temples. The communities of Kanaujiya and Sákádwipi Bráhmans are also large. Up-country Gaur Bráhmans are met with in most villages, and say they come from Rájputáná. Of Kanaujiya Bráhmans, the Sarwariyas are the most numerous. The number of Bráhmans in Monghyr in 1872 was 43,402, found chiefly on the north of the Ganges in the Begu Saráí Subdivision, and in the police division of Kharakpur. (2) Kshattriyas; although not distinguished in the Census returns as a separate caste, are looked on as such in this District, and not confounded either with the semi-military, mostly trading, Khatris, or

with the Rájputs. They are employed in military service, and as policemen, *zamíndárá* retainers, guards, and doorkeepers. The Rájputs, who follow similar occupations, and with whom the Kshattriyas are included, numbered in 1872, 46,836, and are most numerous in the police divisions of Gogrí, Kharakpur, Baliyá, and Jamú. (3) Khattris; chiefly follow the occupations which have given them such eminence in Northern India, trade and commerce, but are also found in some instances in the same employments as the Rájputs; number in 1872, 356, mostly in the town of Súrajgarha. (4) Bábhans, or, as they are called, Bhúínhár or *zamíndárá* Bráhmans, are numerous in this District, and particularly so on the north of the Ganges, where, in the Begu Sarái Subdivision, they are twice as numerous as the whole Musalmán community, and form a fifth part of the entire population. The Rájá of Bettia and several of the large *zamíndárs* of Behar are Bábhans. Although the wealthier and more educated persist in their claim to a pure Bráhma descent, the humbler members of the order acknowledge their inferiority, and themselves repeat the story that when Karna Rájá drove out the Bráhmans, he raised some of the lower castes to the priesthood, and that they are the descendants of the improvised priests. The Bráhmans represent those castes to have been the lowest of the low, such as fishermen, Kaibarttas or Patuás. The evident exaggeration in this theory defeats the object the Bráhmans have in view, as most Súdrás and all the lower castes are of aboriginal descent, while the Bábhans are a fine race, with clearly marked Aryan features. It appears from the Census Report of 1872, that they are to be found in the greatest number in trans-Gangetic Monghyr and the part of Tirhut adjoining it. In Behar they pretend to be Sarwariyá Bráhmans, and apparently in some parts of the North-West they make a similar pretence. Dr. Buchanan Hamilton makes them Sákádwipis. Mr. Forbes, in writing of the castes of Palamau, says that the Bábhans there claim to be Rájputs, and it would seem that in many respects they resemble Rájputs more than Bráhmans. Dr. Oldham, in his Account of Gházipur, notices that most of the subdivisions of the Bábhán tribe are called by the same names as Rájput clans, and that they claim to have come from the same places as the Rájput races of the same name. Mr. Beanes tells us Rájputs will eat plain boiled rice with them off a leaf, and drink from the same earthen vessel, but will not eat a set dinner or one off brass vessels. They certainly do not intermarry with Rájputs; but Bábhans of all classes intermarry

amongst themselves. It seems almost impossible to doubt that they must have originally been a low Aryan race, who were brought into close contact with the Rájputs, probably in some of their struggles for supremacy; and that, not being allowed to intermarry and form one people with them, they have acquired a pseudo-respectability by pretending that they are Bráhmans. This rank is not conceded to them by other castes; and the Káyasths, who will readily eat food prepared by Bráhmans and Rájputs, do not eat that cooked by Bábhans. The latter are a quarrelsome caste, and as their villages are generally apart from, but amongst, Rájput villages, the two tribes are always engaged in boundary disputes. Their number in 1872 was 160,973, of whom 86,924 live in the Begu Saráí Sub-division. (5) Ghátwáls; not a separate caste, but a class claiming to be Kshattriyas, whose profession it formerly was to guard the hill passes, and prevent the incursions of hostile and predatory tribes, for which service they were allowed to hold lands rent free; number 3570, almost exclusively in police divisions Jamúí and Chakáí. (6) Baidyás; the hereditary physicians of Bengal; 14 in number, in the townships of Monghyr and Jamálpur. (7) Káyasths; the writer caste, who find employment in Government and private offices as clerks and copyists, and to a less degree in other occupations; 20,462 in number. (8) Bháts; heralds and genealogists; 1705 in number. (9) Kathaks; also genealogists, but inferior to the Bháts. They sing, recite poetry, and perform on musical instruments in public; some wear the sacred thread, and claim to be fallen Bráhmans; 32 in number.

LOWER CASTES.—Next in social position, and remarkable for their wealth, come the twenty-one trading castes, consisting of—(10) Adhbaniyás, 1512; (11) Agarwálás, 1011; (12) Agráhrí, 113; (13) Bais Baniyás, 8; (14) Baniyás, 27,451; (15) Barnawárs, 5729; (16) Bohras, 21; (17) Gurírs, 1643; (18) Jamanpurís, 78; (19) Kamalkalás, 26; (20) Kasarwánís, 2973; (21) Kasaudhans, 439; (22) Kath Baniyás, 512; (23) Mahurís, 2209; (24) Márwáris, 376; (25) Rauníyárs, 218; (26) Poddárs, 19; (27) Rastogís, 510; (28) Nuníyárs, 1008; (29) Śarāwaks, 34; (30) and Sindúríyás, 1247. Amongst these, the Agarwálás hold the highest place. The Bais Baniyás are grain dealers; Barnawárs, bankers; Kasaudhans, spice dealers; Márwáris, cloth and cotton merchants. Their total number in 1872 was 47,493. The trading castes are followed at some distance by the pastoral, agricultural, artisan castes, and castes employed in

preparing food and in personal service :—(31) Goálás ; a large caste north of the Ganges, who are stock-masters, cattle-breeders, herdsmen, and preparers of dairy produce ; 197,569 in number. (32) Garerís ; an up-country shepherd caste ; 4471 in number. (33) Játs ; a pastoral caste of Hindustán ; 107 in number. (34) Halwáis ; confectioners ; 14,918 in number. (35) Kándús ; sweetmeat sellers ; 52,259 in number. (36) Báruí ; growers and sellers of *pán* or betel, the leaves of a species of pepper plant : (37) Támbulís ; sellers of betel-nut or *supárf* as well as *pán* ; they also deal in other articles. The number of these two castes in 1872 was 12,848. (38) Kaibarttas ; agriculturists ; 55 in number. (39) Koerís ; the chief agricultural caste ; 77,741 in number. (40) Kurmís ; cultivators and domestic servants ; 33,029 in number. (41) Málís ; gardeners and cultivators ; 5360 in number. (42) Nágars ; a cultivating caste ; 7876 in number. (43) Sadgop ; cultivators ; 37 in number. (44) Dhánuks ; mostly domestic servants ; 113,524 in number. (45) Dhobás ; washermen ; 15,772 in number. (46) Hajjáms (Nápits) ; barbers ; 27,020 in number. (47) Káhárs ; palanquin bearers ; 40,703 in number. (48) Barhís ; carpenters ; 29,152 in number. (49) Bhaskárs ; stone-cutters ; 57 in number. (50) Chhipís ; cotton printers ; 21 in number. (51) Churfháris ; bracelet makers ; 3 in number. (52) Darzís ; tailors ; 5 in number. (53) Kánsáris and Thatherás ; workers in brass ; 3421 in number. (54) Kumárs ; potters ; 20,361 in number. (55) Láherís ; lac-workers and bracelet makers ; 1995 in number. (56) Lohárs ; blacksmiths ; 7179 in number. (57) Sonárs ; goldsmiths ; 13,348 in number. (58) Sunrís ; petty dealers and money lenders ; 26,703 in number. (59) Telís ; oil pressers and oil sellers ; 52,765 in number. (60) Benaudíyás ; petty traders and money-lenders, also distillers and sellers of country liquor ; 46 in number. (61) Dhaníyás ; wool-carders ; 773 in number. (62) Jogís ; weavers ; 246 in number. (63) Joláhás ; cotton-weavers and agriculturists ; 77 in number. (64) Patuás ; silk-reelers and spinners ; 480 in number. (65) Tánds ; weavers ; 86,202 in number. (66) Bátars ; day-labourers, 7 in number. (67) Beldárs ; labourers ; 16,676 in number. (68) Korás ; road labourers ; 3301 in number. (69) Nuníyás ; preparers of salt-petre, who have now taken to other employments since the decline of that industry ; 9218 in number. (70) Pairághs or Paragárs ; labourers and menial servants ; 979 in number. (71) Kíwánís ; fishermen ; 54 in number. (72) Khatíks ; sellers of vegetables, spices, onions, and chillies ; 612 in number. (73) Turáhís ; fish-

mongers; 1882 in number. (74) Banpars; fishermen and thieves; 603 in number. (75) Bathuás; boating and fishing caste; 57 in number. (76) Gonris; preparers of lime, also boatmen and fishermen; 13,441 in number. (77) Kaláwats; boatmen; 37 in number. (78) Keuts; boatmen and fishermen; a portion follow husbandry; 3101 in number. (79) Málás; boatmen and fishermen; 13,996 in number. (80) Muriyáris; fishermen; 609 in number. (81) Suramyás; 7976 in number. (82) Tiors; fishermen; 18,014 in number.

SEMI-HINDUIZED CASTES.—A considerable number (82 to 116) of vagabond, semi-Hinduized, and aboriginal castes closes the list. The vagabond castes Dhekwáhás, Dharhís, Galgaliyás, Kheltás, Kurlriyás, Parwariyás, and Ramjánís are in some respects the lowest, though many of the two other divisions cannot be said to hold a much less degraded position. They number 5476, and are mostly dancers, musicians, jugglers; they also exhibit animals, and tattoo. The semi-Hinduized races to a large extent, and the aboriginals in a somewhat less degree, are field-labourers and cultivators. The former are Arakhs and Báheliyás, Bágdís, Báris, Báurís, Bhuiyás, Bindas, Cháins, Chámárs, Doms, Dosádhs, Gangauntás, Háris, Mahells, Markandís, Mihtars, Mukerís, Musáhars, Pásís, Rájwárs, with a total number of 327,017 persons. The aboriginals have been enumerated at a previous page, and are 21,672 in number. The foregoing list is exclusive of 8762 persons of unknown or unspecified castes; 6 persons enumerated by nationality only; and 5657 persons of Hindu origin not recognising caste.

RELIGIOUS DIVISION OF THE PEOPLE.—The great bulk of the population of Monghyr District are Hindus; the remainder being composed of Muhammadans, Christians, and hill people professing aboriginal faiths. The Hindus number 1,613,546, consisting of 801,085 males, and 812,461 females, or 89·0 per cent. of the total population; proportion of Hindu males to total Hindu population, 49·6 per cent. The members of the Bráhma Samáj, or reformed theistic sect of Hindus, are included in the Census Report with the general Hindu population, and there is no means of ascertaining their separate number. They form two communities in the District; one at Monghyr, founded in 1867, and the other at Jamálpur, established in the following year. The Muhammadans of Monghyr District number 87,378 males and 94,891 females; total, 182,269, or 10·1 per cent. of the population: proportion of Muhammadan males to total Musalmán population, 47·9 per cent. The Buddhists number 19

males and 15 females ; total, 34. Some of the trading castes, particularly members of the Agarwála and Saráwak caste, are Jains ; but as they are not distinguished according to their religious persuasion, I am unable to give their precise number. The Christians number 626 males and 516 females ; total, 1,142 : proportion of males in total Christian population, 54·8 per cent. In 1871 there were 80 persons at Monghyr and 66 at Jamálpur attached to the Baptist Mission ; and 50 or 70 at Jamálpur members of the Established Church, consisting of clerks, engine fitters, and domestic servants. Native Christians are said to belong principally to the poorer classes, and to be rather better off than the ordinary natives of the same position. It is observed that converts from the country villages almost invariably find their way to the towns and settle in them. The rest of the population consists of people professing various aboriginal beliefs, who are classified in the Census Report under the name of 'others.' They consist of 7966 males and 8029 females ; total, 15,995, or 9 per cent. of the District population : proportion of males in the whole aboriginal population, 49·8 per cent.

DIVISION OF THE PEOPLE INTO TOWN AND COUNTRY.—The population of the District is almost entirely rural. The Census Report returns only seven towns as containing a population of five thousand souls or upwards, namely, Monghyr, population 59,698 ; Shaikhpurá, population 11,536 ; Jamálpur, population 10,453 ; Barhiyá, population 10,405 ; Súrajgarha, population 7935 ; Bárbigahá, population 6362 ; and Jamúl, population 5197. Details of the population of these towns are given in the table on the following page. The city population does not furnish an undue proportion of the ordinary work of administration. The District Census Compilation thus classifies the villages and towns :—There are 675 villages containing less than two hundred inhabitants ; 752 with from two to five hundred inhabitants ; 564 with from five hundred to a thousand ; 319 small towns with from one to two thousand ; 69 with from two to three thousand ; 37 with from three to four thousand ; 18 with from four to five thousand ; 10 with from five to six thousand ; 7 towns with from six to ten thousand ; 4 with from ten to fifteen thousand ; 1 with from fifteen to twenty thousand ; and 1 over fifty thousand inhabitants. The total number of towns or large villages containing upwards of two thousand inhabitants is 147. The following is an account of some of the chief towns, with their detailed population, etc., as ascertained by the Census of 1872.

TOWNS OF MONGHYR.

61

RETURN OF POPULATION IN TOWNS CONTAINING MORE THAN 5000 INHABITANTS, IN THE DISTRICT OF MONGHYR.

Towns.	Area. Acres.	Number of Houses.	Hindus.	Muslims	Christians.	Others.	TOTAL.			Gross Municipal Income.	Gross Municipal Expenditure.	Rate of Municipal Taxation per head.		
							Males.	Females.	Total.			s. d.	R. a. p.	
Monghyr,	4,480	10,265	44,990	14,346	305	57	28,708	30,990	59,698	£ 1,377 12 0	£ 2,796 2 0	0 7½	0 5 1	
Shailhpur,	1,731	2,098	7,612	3,924	...	...	5,474	6,062	11,536	...	...	...	...	...
Jamulpur,	1,474	2,423	7,320	2,515	618	...	5,875	4,578	10,453	1,147 18 0	1,164 18 0	2 2½	1 1 7	
Barhiyá,	..	1,875	9,757	648	..	...	5,218	5,187	10,405	...	...	...	...	...
Súrajgarha,	...	1,494	6,509	1,421	...	5	4,245	3,690	7,935	...	...	..	...	...
Bartighá,	623	774	5,277	1,085	...	...	3,124	3,238	6,362	...	...	...	...	...
Jamtí,	1,334	1,088	3,779	1,417	1	...	2,611	2,586	5,197	...	...	...	...	...

MONGHYR (Múngír), situated on the south bank of the river Ganges, in the Fiscal Division of the same name, in $25^{\circ} 23'$ north latitude and $86^{\circ} 31'$ east longitude, is the chief town and Administrative Headquarters of the District. It has been a place of considerable importance since the earliest days of the English occupation of these Provinces, although it did not become a Civil Station till 1812. The old Musalmán fort was first occupied by a regiment belonging to the East India Company. At present it is a purely Civil Station, and is in some respects one of the most picturesque in Behar or Bengal. It consists of two distinct portions,—the fort, within which the public offices and residences of the Europeans lie; and the native town, stretching away from the former eastward and southward along the river. The fort is formed by a great rampart of earth enclosing a rocky eminence, which projects some distance into the Ganges, and is faced with stone. It was probably at one time a strong fortification. Towards the north the river comes up to the walls and forms a defence on that side. Landwards, a deep and wide ditch surrounds and protects it. On entering from the railway station by the main gate, known as the *Lál Darwáza* or Red Gate, Monghyr presents a very pretty appearance. The main road runs southward between two large tanks, behind each of which there are low hills. On one of these is the Karna Chaura house, the property of the Mahárájá of Vizianágrám; and on the other a fine building known as the palace of the Sháh Sháh, and now the residence of the Collector, behind which is the palace of Shujá Sháh, the son of Akbar, which has been converted into a jail. Between the hills lie the Government gardens, with trim hedges and neat wire fencing. Beyond the gardens, and usually on low eminences, are the houses of the other Europeans.

The origin of the name of Monghyr is very uncertain. It is said that the place was formerly called Madgalpúri or Madgalasráam, from its having been the abode and property of Madgal Múni, a hermit saint who lived in the early ages of the world. Another explanation, founded on the authority of the *Haribansa*, derives the name from a certain Maúgal Rájá, one of the sons of Viswamitra, son of a Gadhl Rájá, who received this part of his father's dominions; but when he lived, or who he was, there is no means of discovering. Dr. Buchanan Hamilton states that on an inscription, seven or eight centuries old, found at Monghyr, and perhaps

more ancient than the *Haribansa*, the name is written *Madgagirá* or the hill of Madga, and not *Madgalpúrl* or the abode of Madgal. The existence, therefore, both of the saint and prince is very doubtful. The name is probably of a much more homely origin, as *madga* is the Sanskrit word for a kind of pulse, the *Phaseolus mungo* of Linnæus.

The earliest information we possess of any historical event in connection with Monghyr is derived from a copper tablet found within the fort about the year 1780. The date of the plate itself is a matter of much doubt. It contains a date which is differently interpreted, referring to an era which is otherwise unknown. Sir William Jones read it as 33 Samvat, and considered that it referred to the era of Vikramáditya, and corresponded to 24 B.C. Mr. James Prinsep was of opinion that the figures are equivalent to 123, while Captain Wilford made them out to be 132. On the whole, it seems probable that the era referred to is one peculiar to the Pál dynasty; while there is good evidence that these kings flourished during the tenth and eleventh centuries after Christ, and that Deb Pál, the monarch directly mentioned, lived between 1052 and 1059 A.D. It seems to have been set up to commemorate a great meeting of the princes and armies subject to the Pal kings of Patná, in the reign of Deb Pál, the third sovereign of the dynasty. It does not mention that there was any town or fort at Monghyr, but merely relates that the king encamped on the spot, and constructed a bridge of boats across the Ganges; that his numberless elephants darkened the face of the earth, whilst the dust from the feet of the horses of the princes of the north spread darkness all round; and so many were the chiefs and rulers of every part of the earth who came to pay their homage, that the earth sank beneath the weight of the myriads of their attendants.

The following account of the history of Monghyr since the Musalmán conquest is derived in part from a note kindly furnished to me by Mr. Blochmann, M.A., principal of the Calcutta Madrasa, who has collected the information from various Muhammadan chroniclers:—When Muhammad Bakhtyár Khiljí, in A.D. 1195, advanced from his *jágr* lands near fort Chanár, and attacked and took the town of Behar, Monghyr is not stated to have offered resistance. After the conquest, Behar was the seat of the Muhammadan Governors, and Monghyr seems to have been the second town in Southern Behar. It shared, of course, the fate of the Province, which was attached to

Bengal till A.D. 1330, when Muhammad Tughlak annexed it to Dehli. From A.D. 1397 it belonged to the kingdom of Jaunpur. After the time of Buhlál Lodí, it was chiefly in the hands of Afghán chiefs. About A.D. 1494, however, the Afgháns seem to have submitted to Sultán Husáin Sháh, king of Bengal; and the historians tell us that Prince Dányál, son of Husáin Sháh, met Sultán Sekandra Lodí of Dehli near Behar, in the year A.D. 1499, when the Province was formally acknowledged to belong to Bengal. Stewart, in his *History of Bengal*, gives a different account of this transaction. He states that two noblemen, on the part of Sekandra, met the Prince in the town of Bárh, and concluded a treaty, the terms of which were that the Emperor should retain Behar, Tirhut, and Sarkar Sáran, provided he did not invade Bengal. Prince Dányál appears to have been the governor of Eastern Behar on the part of his father. He repaired the fortifications of Monghyr, and built, in A.D. 1497, the vault over the shrine of Sháh Náfeh, the Muhammadan patron of the town. This is shown by an inscription put up by Dányál on the eastern wall of the *dargá* or shrine of the saint, which lies on an elevated spot, reached by a flight of steps, near the old wall of the town. At the foot there are many tombs in a dilapidated state. The *kháddims* of the *dargá* say that when the fortifications were being repaired, Dányál dreamed that a grave near the wall emitted a smell of musk. The grave was discovered, and the Prince built a vault over it, for the tenant of the tomb was clearly a saint. From this circumstance, the saint up to this day is called Sháh Náfeh, from the Persian *náfah*, a pod of musk.

In 1521 Nasrat Sháh, or, as he is better known, Nasíb Sháh, broke the above-mentioned treaty and invaded Tirhut, making his son-in-law, Makhdúm Alum, governor, and stationing him at Hájípur. After this period Monghyr became the headquarters of the Behar army of the Bengal kings, and was for a considerable time under the command of Kutab Khán, a general of high repute, whose defeat by Sher Sháh in A.D. 1533 was the first great success of that chief in the struggles which afterwards placed him on the throne of Dehli.

Under Sher Sháh, Monghyr was the scene of a fight between the Afgháns and the Emperor Humáyun, who was on his retreat from Bengal. In this engagement, Diláwar Khán, son of Daulat Khán Lodí, and ancestor of the renowned Khán Jahán Lodí in the reign

of Sháh Jahán, was captured by Sher Sháh. From A.D. 1545 we find Monghyr mentioned as in the possession of Miyán Sulaimán, an Afghán of the Kararání tribe, who held South Behar for Islám Sháh, son of Sher Sháh. Under Islám Sháh's successor, Muhammad Adil Sháh, Sulaimán, with the view of securing independence, entered into an alliance with Bahádur Sháh, King of Bengal; and when Adil Sháh, or Adlí, as he is generally called, retired before the advancing army of Akbar, Bahádur Sháh and Sulaimán attacked him near Súrjagarha, west of Monghyr, and defeated and killed him (A.D. 1557). In A.D. 1563, Sulaimán became ruler of Bengal and Behar, but acknowledged the suzerainty of Akbar. He was succeeded, in the beginning of A.D. 1573, by his second son, Dáúd Sháh, who refused to pay tribute to the Mughul Emperor. Akbar, therefore, in A.D. 1574, invaded Behar and conquered it. Soon after, in A.D. 1580, the great Bengal military revolt commenced, and Monghyr was for a long time the *point d'appui* of Akbar's officers in their expeditions against the rebels. Todar Mall, for example, occupied Monghyr for a long time, and held in check the rebel army of 30,000 horse, who, in their advance on Behar, were encamped at Bhágalspur, till, by his influence with the Hindu *zamíndárs*, he had stopped all their local supplies and forced them to disperse. He also repaired the fortifications.

When Sultán Shujá, the second son of Sháh Jahán, on hearing of the dangerous illness of his father in A.D. 1657, raised the standard of revolt and claimed the imperial throne, Monghyr formed the centre from which he directed his preparations, and to which he retired after his defeat in the following year at Bahádurpur, near Benáres, by Sulaimán, the son of Dará Shukoh. The lines of Monghyr held out against the victor, till he was summoned back to Agra to assist his father against Aurangzeb. In 1659, Monghyr again afforded Shujá shelter after his defeat at Kudwa by Aurangzeb, till Mír Jumlá turned his position by sending troops through the Sherghátí passes, and forced him to retire on Rájmahál.

Concerning the position of Monghyr as chief town of a *sarkár*, we have a few references in the *Ain-i-Akbarí*, which gives Todar Mall's rent-roll. According to it, *sarkár* Monghyr consisted of 31 *mahals* or *pargands*, paying a revenue of 109,625,981 *dáms*,—40 *dáms* being equal to one Akbarsháhí rupee,—and furnishing 2150 horse and 50,000 foot soldiers. These numbers, however, are perhaps nominal rather than real, for south of Monghyr the country was mostly in the hands

of the Rájás of Kharakpur. *Parganá* Monghyr itself was assessed at 808,907½ *dáms*. Monghyr was also for some time the residence of Rájá Mán Sinh, who reconquered Bengal and Orissa; and it was here that a pious Musalmán, named Sháh Daulat, whom Mán Sinh favoured, tried his best to convert the Rájá to Islám. During the reign of Jahángír, Kásim Khán, brother of Alí-ud-dín Islám Khán, was in charge of *sarkár* Monghyr. Kásim Khán, on the death of his brother, became Governor of Bengal. Two *jágírdárs* of Monghyr are also mentioned, Sardár Khán and Hassan Alí Khán (A.D. 1619). In the first year of Sháh Jahán's reign, A.D. 1628, Sayyid Muhammad Mukhtár Khán was appointed *táyúldár* of Monghyr. He distinguished himself in the war with the Ujjainiah Rájás of Durnáon in Gayá about A.D. 1637. Another *táyúldár* of Monghyr was Maháldár Khán. Towards the end of Sháh Jahán's reign, Monghyr became for a time the residence of Prince Shujá, his second son, and the Governor of Bengal. The success of his younger brother Aurangzeb, however, forced him, in A.D. 1659, to retreat from Monghyr to Dacca. The historians of Aurangzeb's reign mention only one event in connection with Monghyr, namely, the death and burial at Monghyr of the poet Mullá Muhammad Sayyid, who wrote under the *nom-de-plume* of 'Ashraf.' He was the son of Mullá Muhammad Sálíh of Mazandarán, near the Caspian Sea, and stood in high favour with Prince Azím-us-shán, Aurangzeb's grandson, and the Governor of Bengal and Behar. He had also been for a long time the teacher of Zebunnissá Begam, Aurangzeb's daughter, herself a poetess of renown. The poet died at Monghyr, where his tomb is still pointed out, soon after A.D. 1673, whilst on his way from Bengal to Mecca.

Monghyr afterwards became a place of importance, in consequence of Mír Kásim selecting it as his capital when he began to meditate driving the English out of Bengal. The trade in firearms, for which the town has since continued remarkable, dates from that time, as Gurghin or Gregory Khán, once an Armenian cloth merchant of Ispahán, Mír Kásim's favourite general, established an arsenal in the fort. It continued to hold its pre-eminence till the final defeat of the *Súbahdár* at Udanálá in October 1763. A spot on the river side of the fort is still pointed out, where the two wealthy bankers, the Setts, were murdered on suspicion of their favouring the English. They were thrown from a high tower into the Ganges, shortly before the members of Council, Mr. Ellis, Mr. Hay, and Mr. Lushington, were shot down by Samru at Patná.

Dr. Buchanan Hamilton gives the following account of the origin of the shrine of Chandisthán, near Monghyr :—‘ At Vikramchandi is a hole in a rock sacred to Chandi, the *grám-debatá* of the place, covered by a small building of brick. This goddess was courted by two of the most powerful sovereigns. of India, Vikram and Karna, who are here considered as having been contemporary. Karna, in order to procure her favour, hit upon the happy expedient of tormenting himself by a daily immersion of his body in boiling *ghi*; and by this means he every day procured one and a quarter *mans* of gold, which he distributed to the poor. Vikram, jealous of such favour shown to a neighbouring king, came in disguise, and, entering the service of Karna, found out the manner in which his rival worshipped. He then determined to excel, which he accordingly did by slicing his skin in various places, and, having offered his blood to the goddess, he gave himself exquisite torment by filling the gashes with salt and spices; after all which, he went into the bath of his rival. Such a gallant worshipper obtained the decided favour of the goddess, who has ever since been called Vikram-Chandi.’

The principal family now resident in the town is that of the Sháh Sáhib, whose palatial residence I have before mentioned. I have obtained a full account of the family, drawn up by one of its members, and give it in full, as an interesting instance of the manner in which the Musalmáns of Western Asia took their place amongst Indian landholders, and as a specimen of native history written by a native :—

‘ The family history begins with Hazrat Mauláná Sháh Mustafá Sofi, a man of learning and the highest respectability; he was a native of Seistán, a town of Persia. The fame of his vast learning and the high distinction in which he was held reached the court of the Emperor Jalál-ud-dín Akbar. He was invited to the Emperor’s palace in Dehli; valuable presents, in the shape of *khiláts*, were given to him, in addition to an extensive *jágír*. He was principally employed in imparting education, but this was not the only thing he had to do; he was always consulted on political matters, and his opinion was not merely asked for, but was followed. When the Afgháns revolted in Bengal and Behar, Muhammad Munim Khán went forth with a large army to subdue them; but, seeing the superiority of their numbers, he asked the Emperor to come out in person. The Emperor visited the east, accompanied by a large body

of armed men, amongst whom Sháh Mustafá Sofi distinguished himself; he was valiant, and possessed peculiar powers in the field of battle. While in the east, he heard the great name of Hazrat Sháh Aladád Arafín, who was a man celebrated for piety. Mustafá Sofi wished much to meet this holy man, and abandoned all ambition for wealth and honour. His intentions were communicated to the Emperor, who, as well as Muhammad Munim Khán, were importunate for the Sofi to continue with them, offering him grants and high honours. The Sofi took neither the one nor the other, but came down to Monghyr to meet the renowned religious devotee. The meeting of Sofi with Hazrat Sháh Aladád Arafín was one of considerable and respectful ceremony. He kissed the Hazrat's feet, and asked him a question in Arabic. The Hazrat at once understood him, and looking at him, the Sofi became insensible. Sháh Mustafá Sofi revived in a minute, and thenceforward became the disciple of the Hazrat, whom he venerated as the saint of saints. The great Aladád convened a meeting of respectable men, and in their presence made him Sijáda Nishin, by dressing his head with a turban, and presenting him with rosaries, etc. Mustafá Sofi died on the 4th day of Zilhij, 1050 Hijra, and his remains were interred in Diláwarpur. Sháh Sharif-ud-dín Ghaus, his son, succeeded him; he walked in the footsteps of his father, and was remarkable for his charity and kind feeling for the poor. The Emperor Aurangzeb Alamgir heard of his renown, and made him extensive presents in land and money. He hesitated much to accept the daily allowance fixed for him by the Emperor; compliance, however, was afterwards accorded, with the view to relieve the poor. He died on the 7th day of the Muharram, 1070 Hijra. He left one son, Sháh Tájudín Ghaus, who inherited all the good qualities of the father. Then comes a detailed genealogical account of the heads of the family down to the present day.

In 1811, Dr. Buchanan Hamilton estimated the population of Monghyr to be 30,000 souls. In 1869, the experimental Census disclosed the following results:—Number of houses, 13,179. Population—males 26,450, females 27,531; total 53,981: average number of souls per house, 4.09. The regular Census of 1872 showed a still further increase of the population. The results then ascertained were as follow:—Hindus—males 21,780, females 23,210; total 44,990. Muhammadans—males 6773, females 7573; total 14,346. Buddhists—males 18, females 15; total 33. Christians—

males 128, females 177; total 305. 'Others'—males 9, females 15; total 24. Total of all denominations—males 28,708, females 30,990; grand total 59,698. In 1874-75 the gross municipal income amounted to £3139, 18s. od., and the gross municipal expenditure to £3317, 10s. od.; rate of municipal taxation, about 4 *denads* 7 *pies* or 6½d. per head of the population. The Collector has supplied me with the following additional information concerning municipal affairs in Monghyr in 1874-75. There were sixteen members of the Municipal Board, of whom six were officials and ten non-officials, nine were Europeans and seven natives. The number of sittings held during the year was twenty-five. The balance at the close of the preceding year, 1873-74, was £1182, 14s. od. During the year, the tax on houses, lands, and buildings produced £1487, 14s. od.; the tax on horses, carriages, and carts, including registration fees, £239, 16s. od.; the proceeds of the cattle pound, £34; tolls and ferries, £750; rent of land belonging to the municipality, £21, 18s. od.; rent of the municipal *bdsadr*, £17, 2s. od.; fines levied under the municipal law, £39; whilst other sources gave £550, 8s. od.: total income, £3139, 18s. od. The income of the previous year, 1873-74, had been £3587, 6s. od.; and the average income of the three preceding years, £3141, 8s. od. The expenditure on police was £959, 16s. od.; on conservancy, £406, 4s. od.; in paying the salaries of municipal establishment, £451, 16s. od.; on the repair of roads, £814, 4s. od.; on buildings, £201, 4s. od.; on other works of public utility, including lighting, £109, 6s. od.; miscellaneous expenses, £375. Total expenditure, £3317, 10s. od.; leaving a balance in hand at the close of the year of £1005, 2s. od.

JAMUI, situated within the Fiscal Division of the same name, in 24° 55' 30" north latitude and 86° 15' 51" east longitude, is principally important as the headquarters of the Jamui Subdivision. It stands on the left bank of the river Keul, and at a distance of about five miles to the south-west of the Jamui station on the chord line of the East India Railway, with which it is connected by an unmetalled road. The town consists for the most part of one long street, forming a continuation of the railway road for a distance of nearly two miles; on either side of this street lie the shops and dwellings of the grain merchants and shopkeepers, who, with their families and servants, form the bulk of the population. From this wide street minor roads branch out at right angles, leading to the non-trading

parts of the town and the residences of the native civil functionaries, court pleaders, and attorneys. Although lying within the great alluvial rice plain which the Ganges has formed, the town shares in the declination of the country from the Chakál and Hazáribágh plateau northwards. This circumstance, and the proximity of the Keul, afford a perfect drainage, and render it one of the healthiest places in the District. On approaching Jamúl from the railway station, the first public building met with is the Subdivisional office and Magistrate's residence,—masonry buildings of the ordinary standard plan. On the opposite side of the road is the *múnsif's* office. About a quarter of a mile within the town, on a clear open space, stands the police station. Immediately behind it a new masonry lock-up has been built; behind this, again, the charitable dispensary, which was completed in 1874. The latter is a fairly good building of its kind. The inner walls are of sun-dried bricks, resting on a foundation of masonry. It has a verandah on all four sides, supported by masonry pillars, the whole being covered by a tiled roof. Below the tiles, several inches of thatch serve to moderate the heat of the sun. About a hundred yards farther is the Anglo-vernacular school, also lately built, in much the same style as the dispensary. At the western extremity of the town stand the opium office, the *gányá* stores, and the distillery. The private buildings and shops of the town almost uniformly consist of mud houses, with tiled roofs. The few exceptions have walls made of small burnt bricks set in mud. The trade with places outside the Subdivision consists in exports mainly of *mahuá* flower upward by rail to Patná for distillation, and *mahuá* oil; downwards by rail to Bengal and Calcutta are sent *mahuá* oil, buffalo *ghí*, shellac, oil-seeds, wheat, grain, and *gur* or molasses. The imports by rail are cotton from Mírzápúr, tobacco from Patná, and piece-goods and metal vessels from Calcutta. Apart from the line of rail, the trade is carried chiefly by pack-bullocks. The roads are all unmetalled. One of the principal lines runs to the railway station, crossing the Koel and Anjáná rivers. It is then continued eastward by an unbridged newly-constructed famine road through Gangta to Kharakpur, and thence connected by a metalled road with the loop line of railway at Bariárpur. The above rivers rise in the hills to the south, and after heavy rains become violent torrents, cutting off, sometimes for several days, direct communication with the railway. In that case the nearest way to the line is along the road to Lakhísarál, by which means the

Keul is avoided. This road is twenty miles long, and bridged throughout, but unmetalled. A country road passes southwards to join the Hazáribágh Grand Trunk Road. Newly constructed unbridged famine roads run to Sekandrá, and thence westwards, connecting the Subdivision with the Gayá roads and the valley of the Sakra, and passing from the Hazáribágh Grand Trunk Road to Patná through Gayá.

The town itself, which is a growth of late years, has no traditions and few antiquities. At its southern extremity there are the remains of an old fort near the village of Dudupa. Jamúl was one of the places of which the population was enumerated at the time of the experimental Census of 1869, with the following results:—Number of houses, 2672. Population—males 2374, females 2245; total 4619: average number of inmates per house, 1.73. In 1872 the regular Census showed that the population had increased, the number being returned as under:—Hindus—males 1852, females 1927; total 3779. Muhammadans—males 758, females 659; total 1417. Christians—1 male. Total of all denominations—males 2611, females 2586; grand total 5197.

GIDHAUR, situated within the Fiscal Division of the same name, in $24^{\circ} 51'$ north latitude, and $86^{\circ} 14' 31''$ east longitude, is interesting as the seat of one of the oldest of the noble families of Behar. Like Bausi in Bhágalpur, Gidhaur is the site of one of the deserted towns met with along the hill frontier. In the neighbourhood are the ruins of an old castle of considerable size, built of great blocks of stone without any kind of mortar, and entered by four gates, called after the elephant, the horse, and the camel, and on the east side after the great god Mahádeo. Its erection is often attributed to Sher Sháh; but it is probably of much earlier origin, although it may have been repaired by that prince during his war with the Emperor Humáyun.

The following account of the Rájput family that takes its title from Gidhaur, and is now represented by the Mahárájá Sir Jái Mangal Sinh, K.C.S.I., has been supplied to me by the Collector of Monghyr. The founder of the family was Bir Vikram Sinh, a Kshattriya, or rather Rájput, of the Chandrabansí or lunar sept. The earliest account of his ancestors represents them as holding a small estate called Mohaba, in Bandel-khand, from which they were driven out, seemingly by the Muhammadans, in the eleventh century. They settled at Bardí, a town within the present limits

of Rewah, and became masters of a considerable principality. In the year 474 B.S. (A.D. 1168), Bír Vikram Sinh, the younger brother of the Rájá of Bardí, accompanied by a large retinue, set out on a pilgrimage to the shrine of Baidyanáth at Deogarh, in the present District of the Santál Parganás. The god is said to have shown him special favour, appearing to him and bidding him seize on the surrounding country. It is more probable that he had observed the unwarlike character of the aboriginal Kshetauris, and used this pious fraud to cover an act of unjustifiable aggression. With Bír Vikram the Gidhaur family begins, and now after twenty-two generations it is still wealthy and influential. Puran Mal, the ninth Rájá, built the great temple of Baidyanáth, and in the Sanscrit *sloka* or verse inscribed on the top of the inner door of the sanctuary, he is called *ure pati*, or king of men, a title that bears witness to the position of the family several centuries ago. Dúlan Sinh, the fourteenth Rájá, received distinguished honours from the Musalmán Government, and the title of Rájá was confirmed to him by a *farmán* of the Emperor Sháh Jahán, which still exists, bearing date the 21st Rajab 1068 A.H., corresponding to A.D. 1651. When the English assumed the government of Bengal and Behar, Rájá Gopál Sinh, the nineteenth in succession, was for a time deprived of his estates, but soon after recovered possession. A fresh *sanad*, conferring the title of Rájá as an hereditary distinction, received the seal of the Viceroy on the 11th January 1856. This honour was conferred in consequence of the loyal exertions of Jál Mangal Sinh in the Santál Rebellion of 1853, and subsequently during the Mutiny. It was afterwards considered that this was an inadequate reward for these services, and in 1865 he was created a Mahárájá for life, and in the following year was invested with the insignia of a Knight-Commander of the Star of India. A considerable estate or *jágír*, free of revenue, was also granted to him and his descendants for ever. At the present time Sir Jál Mangal has retired from public life, and has made over to his eldest son, the Jubaráj Seoprasád Sinh, the management of his property.

JAMALPUR, a township in the Monghyr Fiscal Division, situated in 25° 18' 45" north latitude, and 86° 32' 1" east longitude, is principally remarkable as containing the largest iron workshops in India. They are the property of the East India Railway, and cover an area of about 30 acres. The town lies about six miles

due south of Monghyr, and is for the Indian plains a considerable European settlement. It is built in the form of a rectangle lying north and south, one-third of its area to the south being occupied by the workshops. The remainder, which is nearly a perfect square, contains the houses of the European overseers of different grades. The large European population has rendered necessary the establishment of a slaughter-house, which yielded in 1874-75 a revenue of £11, 16s. od., and cost £3, 5s. 11½d. in repairs. The report of the Medical Officer of the station, dated the 31st December 1874, gives a favourable account of its health. 'The half-year now ended has been exceptionally healthy. No epidemic has visited this station, and the health of the company's employes, as well as that of their families, has been better during these last six months than during any six months of previous years, so far as I can judge from office records. There was an outbreak of cholera and fever here in July. The origin of these diseases was traced to defective drainage, and the malaria rising from pools of stagnant water. It was also discovered that some of the villagers used the water in these hollows, converted into temporary tanks by the heavy rains, for cooking purposes, rather than be at the trouble to go a couple of hundred yards for their supply. Every hollow was filled up, and the ditches cleaned. In a few days both cholera and fever subsided, and the villagers have enjoyed good health from that day to this. Sanitation is receiving much attention, the budget estimate for 1875-76 amounting to £400.' The railway workshops give employment to about 3000 labourers, and 150 engines are usually in the shops, of which 60 are actually undergoing repair. The Company does its work through a number of native middle-men, who are paid by the piece. The works have attracted the best iron-smiths from many parts of Behar. In the Statistical Account of Purniah I have mentioned that the resident planters account for the scarcity of skilled smiths by the fact of their having left the District to go to the Jamálpur workshops.

In 1869 the experimental Census showed the following results: Number of houses, 2326; Population—males 4315, females 3062—total 7377; average number of inmates per house, 3.17. The regular Census of 1872 showed that the population had greatly increased in the three following years. The results then ascertained were: Hindus—males 4141, females 3179—total 7320 Muhammadans—males 1367, females 1148—total 2515; Chris

tians—males 367, females 251—total 618; total of all denominations—males 5875, females 4578—total 10,453.

Jamálpur has been constituted a township under Act III. of 1864. In the year 1874-75 the following amounts were collected under the provisions of that law, and dispensed for municipal purposes. Receipts: (1) house tax on the premises of the East India Railway Company, £924; (2) house tax on the native town, £324, 18s. 11½d.; (3) horse and carriage tax, £618, 1s. od.; (4) municipal fines, £9, 16s. 3d.; (5) miscellaneous, £82, 5s. 6½d. Total, including a balance of £120, 19s. 4½d. from the previous year, £1523, 17s. 1¾d. Expenditure: (1) office establishment, £148, 13s. 5½d.; (2) office rent, £26, 8s. od.; (3) contingent charges, £31, 18s. 0¾d.; (4) conservancy establishment, £331, 1s. 9d.; (5) police establishment and contingent charges, £321, 16s. 11¾d.; (6) cemetery establishment, £42, 11s. od.; (7) pound establishment, £9, 12s. od.; (8) salary of vaccinator, £9; (9) printing charges, £8, 8s. 6d.; (10) survey charges, £21, 15s. 10½d.; (11) watering charges, £9, 12s. od.; (12) land rent, £11, 7s. 10½d.; (13) reward for killing snakes and dogs, £15; and (14) miscellaneous, £227, 2s. 10½d. There was also an expenditure of £164, 15s. 9¾d. for filling up some old tanks, the malaria from which was supposed to have aggravated an outbreak of cholera that occurred during the year. The total expenditure of the year, therefore, was £1379, 4s. 1½d., leaving a balance on the 1st April 1875 of £144, 12s. 11¾d., to which must be added £101, 1s. 1½d. arrears of previous years realized during 1874-75, giving a total balance of £245, 14s. 1¾d. The Collector returns the income for each of the past seven years as follows:—1868-69, £1274, os. 4½d.; 1869-70, £1382, 10s. 11d.; 1870-71, £1689, os. 7½d.; 1871-72, £1668, os. 6½d.; 1872-73, £1615, 10s. 8½d.; 1873-74, £1579, 19s. 4d.; 1874-75, £1646, 8s. 2½d.

THE HOT SPRINGS of Sítákund and Rishikund must be mentioned amongst the remarkable places of Monghyr District. The best account of them is that given by Dr. Buchanan Hamilton, from which I have condensed the following paragraphs:—The Sítákund spring is situated about five miles east from the town of Monghyr, and is confined within a brick cistern. Near it, and within the same enclosure, are four other tanks similar to it, except that they contain cold water. These latter are dirty and stagnant, and form a great contrast to the clear water of the Sítákund. They

are named the wells of Rám, Lakshman, Bharat, and Satrugan, after the husband of Sítá and his three brothers. No mention is made of this place in the *Rámáyana* of Valmiki ; but the priests say that an account is given of it in the *Kurma Púrana*, a part of the eighteen books alleged to have been written by Vyas. Rám, after having killed Rávan, king of Lanka, was haunted by the constant appearance of that prince, who, although a *rúksasa* or demon, was a very holy Bráhmaṇ, and on account of his piety was served by the gods as his menial servants. In order to expiate his crime, Rám set out, according to Hindu custom, to travel from shrine to shrine till the deities might have pity on him. In his wanderings, he and his wife and brothers came to Kashtáharání, where they knew all the gods would be assembled to bathe, and here he at last obtained forgiveness. But the gods, who had condoned his offence and accepted of fruit from him and his brothers, rejected the offering of Sítá, alleging that they suspected her of having been unfaithful to her husband when she had been in the power of Rávan. She had once already allayed the jealousy of her husband by passing through a fiery ordeal, but the gods now determined that she should undergo another before they would eat from her hand. To prove her purity, she threw herself into a fiery pit, and as she issued unscathed from its flames, a pure and limpid stream leaped from their midst.

The scene of this miracle became the holy shrine we are describing. The officiating priests are Maithila Bráhmaṇs. Most of the 30,000 people who annually bathe at Kashtáharání repair afterwards to Sítákund, and worship there ; and on the birthday of Rám about 1000 people assemble to celebrate the memory of that event. Besides, vast numbers of travellers from curiosity and pilgrims through religious motives resort hither, so that the offerings are considerable ; but they are divided among so many, that in general the Bráhmaṇs of the place seem a needy body of men. The spring is situated in a plain near the Ganges, throughout which at short distances are scattered small rocky hills of quartz or silicious hornstone. The stones from which the hot water issues are of the same nature, but seemingly all detached pieces. The cistern is about eighteen feet square, so that one cannot judge so well of its nature as in the places that will be afterwards mentioned. It does not appear to differ from the others in any material respect, except that it is at a little distance from any hill, whilst all the others issue from the foot of

some rocky eminence. Air bubbles are constantly rising from different parts of the bottom of the tank, many issuing together with irregular intervals before the next explosion. Near where they issue the water is always hottest. Dr. Buchanan Hamilton visited this spring on the 7th April, a little after sunrise. The thermometer in the open air stood at 68° Fahr. ; and in the hottest part of the reservoir, where many air bubbles escaped, it rose to 130° . The priests said that about eight days before it had become cooler, and that the heat would gradually diminish until the commencement of the rainy season,—a statement that seems to have been proved by subsequent observations. He visited the spring again on the 20th April, at sunset, the wind having been all day hot and dry ; the thermometer in the air stood at 84° , in the well it marked 122° . On the 28th April, again, a little after sunset, when the wind was blowing strong from the east, but was not dry, the thermometer in the air was 90° ; in the well it only rose to 92° . The water still continued clear ; but soon after, owing to the reduction of the heat, and the natives being in consequence able to bathe in the well, the water became very dirty. In the beginning of July, on the commencement of the rainy season, the water, in consequence of a return of heat, became again limpid ; and on the 21st of that month, the thermometer at sunset, which stood in the air at 90° , in the water showed 132° of heat. On the evening of the 21st September, the thermometer stood in the air at 88° , in the cistern at 138° , and the number of air bubbles had very evidently increased.

About five or six miles from Sitákund, at the western foot of the ridge running south from Monghyr, at a village called Bhurka, is a second hot spring, which rises from three sources, that unite in one pool. Two of these come from under a rock of red and grey rude jasper, and are not accompanied by air bubbles ; the third rises at a little distance, with numerous air bubbles. On the 9th April, in the morning, the thermometer in all the three sources rose to 112° .

The third hot spring is at Rishikund, about a mile south from the last, and at the foot of the same hill. It has been made a place of worship, and a reservoir has been built to collect the water into one pool. This is about 140 feet square ; but the springs are unable to heat so large a body of water so as to prevent vegetation or bathing. The pool, therefore, especially on the side most remote from the sources, is overgrown with aquatic plants. The bottom of the pool is in some places sandy, in others rocky ; and the water seems to

issue all along the western side from different crevices in the rock. The air bubbles rise from the whole extent of the pool near the hill, for a space of about thirty feet wide and one hundred and forty feet long; and had the reservoir been confined to this extent, its heat would have kept it clean. Where the air bubbles issue from among sand, they form a small cavity like a crater. On the morning of 8th April, the thermometer in the air stood at 72° ; in the water where it issued from the crevice of a rock it rose to 110° , and in one of the craters to 114° .

About fifteen or sixteen miles south from Rishikund are the hot springs of Bhímbándh, by far the finest in the District. They issue from the bottom of a small detached hill on its east side, and at such a small distance from the Man river that they may be considered one of its sources. The hill from which they issue is situated east from the great irregular central mass of the Monghyr hills, and is called Mahádeo. It consists, so far as can be seen, of quartz or silicious hornstone. The hot water issues from four different places at some distance from each other, and at each place it springs from many crevices of the rock, and from between various loose stones with which the ground is covered. Each of these four sources is much more considerable than the Sítákund spring, and many air bubbles accompany the water, which is limpid and tasteless, 'but evidently contains earthy matter, as the stones from which the very hottest parts issue are encrusted with a tufaceous deposition, which very much resembles calcareous tufa, but does not effervesce with nitric acid, unless the separation of a few globules of air, on its first immersion, can be considered as such.' The thermometer, on the morning of the 21st March, in most of the sources stood at 144° , but when immersed in places where many air bubbles issued, it rose to 150° . The water of the Man river, near the springs, is somewhat hotter than the atmosphere. In the air, about eight o'clock in the morning of the above-mentioned day, it stood at 76° , in the river it rose to 82° . In one place of the stream Dr. Buchanan Hamilton observed some air bubbles rising, and there, although the stream is of considerable size, the thermometer rose to 98° .

The fifth hot spring is at Málnipahár, about seven miles east and north from Bhimbándh, and forms the source of the Anjáná river. It is not so large as any of the Bhímbándh springs, but far exceeds all of the other hot springs already described. It issues from the bottom of Málnipahár, a part of the central cluster of the Monghyr

hills. A space of about twenty yards in length and twenty feet in width is covered with fragments of rock, under which the water may be heard running, and in some places seen through the crevices, until it comes to the lower side, and forms into little streams that soon unite. The stone from among which the water issues is a kind of jasper of a horny colour, stained with red. On the 22d March, at sunrise, the thermometer in the air being at 62° , on being placed on the stones rose to 80° ; on being immersed in the water flowing among the stones, it rose to 146° ; and on being placed in a crevice of the rock from whence the water issued accompanied by air bubbles, it marked 150° , which at all the springs is probably the maximum of the heat. About twenty yards from the hot springs is a bed of calcareous tufa, such as has been already mentioned. On pulling out a stone that had been surrounded by this concretion, Dr. Buchanan Hamilton found it warm, although perfectly dry; and the thermometer, on being placed in the cavity, rose to 90° .

VILLAGE INSTITUTIONS.—The Collector in 1874 reported that the following village officials were found in the District of Monghyr:—(1) *patwáris*; (2) *gumáshtás*; (3) *navasindás*; (4) *bardhils*; (5) *badhwáras*; (6) *sális*; (7) *amíns*; (8) *kándís*; (9) *kumárs*; (10) *mukaddams*; and (11) *jeth rayats*. The following short description of each is derived from his report, and represents the present position of these officers:—

The PATWARI was formerly one of the principal officers of the *kánungo's* staff, and as such a subordinate official of Government. His chief duty was to check the proceedings of the farmers of the revenue; at the same time he was the repository of all information concerning the village lands, their crops, and boundaries. He now keeps the rent-roll of the village, and is in fact the village accountant. Where there is no *gumáshtá*, he collects the rents also, and is besides not infrequently employed in the measurement of lands, etc. In short, he is expected to do whatever the *samíndár* tells him, his position as a Government official being almost entirely lost. He receives a salary of Rs. 3 per mensem, besides a small quantity of grain from every *rayat* at harvest-time, which gratuity is called *márgan*. Regulation xii. of 1817, relating to *patwáris*, is almost a dead letter in Monghyr. The appointment of this officer is but rarely reported to the Government, and no other provision of the law is ever followed. The District Register shows the total number of *patwáris* appointed during the past forty-four years to be 1574; but

probably many of these are dead or have resigned, and there is nothing to show their exact number at the present day. Ordinarily, there is a *patwāri* to each estate, but where the estate is large or divided among several sharers, there may be more than one; on the other hand, where there are several small adjoining estates under one proprietor, one *patwāri* is considered sufficient for all. They appear to be invariably selected from the Káyasth caste, and are usually intelligent men, and powerful for good or evil, as they are still considered great authorities in all matters relating to the villages with which they are connected.

The GUMASHTA has always been a servant of the landlord, to collect the village rents, the *patwāri* keeping the accounts for him. He receives from Rs. 3 to Rs. 4 per mensem, and *māngan* presents like the *patwāri*.

The NAVASINDA is over the *patwāri*, and keeps the *samindāri* accounts, granting receipts to the *rayats*; where there is no *gumdshtā*, he takes his place, and collects the rents himself. He receives Rs. 4 per mensem from the *samindār* as regular salary, but has no recognised perquisite except such as his influence can extort.

The BARAHIL does the work of a messenger, brings the tenants to the managing office of the estate when they are wanted, and receives a salary of Rs. 2 per mensem. The Collector has not been able to ascertain the origin of this office. According to the *samludars*, it has existed from time immemorial, and is often hereditary.

The BADHWARA's duties are to watch the crops and prevent cattle straying on them. He is paid a pittance by the *rayats* in grain at harvest time. The term is derived from *badh*, a meadow.

The SALIS' duty is to arbitrate between the *samludār* and *rayat* regarding the produce of each field. He gets a small percentage of grain from each party. His office is not hereditary or permanent in one family.

A regular ANIN is employed only by the larger landholders as a permanent servant; but in parts of the District where the *bhdāl* system of land-tenure prevails, he is frequently met with as a respectable villager, who receives something from the *samludār* for measuring and surveying the village crops during the short periods of harvesting. As soon as he declares the area of any field, the *sālīs* determines its produce per *bighā*, and assigns the share payable to the landlord.

The KANDI's duty is to provide certain articles, such as firewood,

etc., for the members of the *samindār's* managing establishment when they visit the village on duty; whilst the KUMAR or village potter is required to supply pots and pans free of cost. Both are paid according to a curious system, called *nāchā*, or literally, plucking. As the *amin* measures the field in order to make an estimate of the produce, the *kāndī* and *kumār* follow him and pluck with their hands as much grain as they can, until the measurement is completed. It is said that this custom has prevailed ever since the Hindus have been divided into castes. These officials also get their homestead land rent-free.

The MUKADDAM on the north of the Ganges, and the JETH RAYAT on the south, hold almost precisely the same position as the *mandat* does in the villages of Bengal. They are the chief, most trusted, and usually most intelligent villagers; well-versed in everything that concerns the village, and the ordinary arbitrators between the village people themselves and in cases of differences between them and their landlords. They assist in making settlements of land, and are supposed to know the value of the fields and their boundaries. The post is often hereditary, and has no regular remuneration, but the landlord usually distinguishes the holder by a present of a new turban cloth on the first rent-settling day of the year.

THE MATERIAL CONDITION OF THE PEOPLE of Monghyr represents a very low standard of civilisation and comfort. The Collector in 1875 reported that 'the main body of the people in this District are not much to be envied, nor can they be said to be prosperous, since they get barely sufficient food and clothing.' At the same time, he wrote, 'so very little suffices to keep the natives well and strong, that any person in the possession of five rupees or ten shillings per month, and blessed with good health, may be said to be prosperous and happy, even though he has a family to support.' A'original or semi-aboriginal tribes are numerous. They rarely hold land, and live on the coarser kinds of grain. The dress of the men is usually confined to a waist-cloth; they also have a head-cloth, which is used in the hottest weather to keep off the heat of the sun, and in the cold weather to protect against the chill of winter. They sometimes possess a cloth to wear over the shoulders, when they wish to appear more respectable than usual. The whole suit costs only R. 1 to R. 1. 8, or 2s. to 3s. The dress of the women, although less incomplete, is coarse, and usually dirty. Whatever wealth there is in the country

is in the hands of a few landlords, middlemen, merchants, and shopkeepers. The furniture of a middle-class shopkeeper's house consists of a few large wooden chests with rude native locks, in which the commodities he deals in are stored; two or three smaller chests for keeping his own property, in which any valuables or good clothes he has are kept; a couple of cane or bamboo stools six or eight inches high; a *charpái* or rough bed of netting on a wooden framework; a hand grain mill; a few brass pots and pans; and usually a spinning-wheel for his wife. His house has mud walls, and sometimes a tiled roof. The peasant's or labourer's dwelling is entirely constructed of mud, with a thatch roof. Inside there is very little except a few baked earthen vessels, a single wooden box, a brass plate or two, and a grain mill,—altogether worth about Rs. 5 or ten shillings.

The Collector in 1872-73 took a more hopeful view of the condition of the people than in the passage quoted above. He wrote: 'The price of labour in Monghyr is one-third higher than twenty years ago, but the condition of the labourer, in consequence of at least an equal rise in the price of food, has not improved. The labourer in Monghyr, however, if he arrives at the age of twenty, able-bodied and in good health, can earn sufficient to make his condition as good as almost any ordinary labourer in the world. He can live in some luxury on Rs. 3 a month, and is better off than the agricultural labourer in England on twelve shillings a week. His hut can be run up for Rs. 10; and if he is a popular man, and can get his neighbours to give him a helping hand, it will cost considerably less even than that amount. His clothes cost him a mere nominal sum; shoes and stockings he does not require. A *lotá* and a plate are his only furniture; he requires no chair, finding the ground a more comfortable seat; and he has a good meal of rice, fish, spices, with cucumber or melon to finish up with, for the equivalent of an English penny. Then his tobacco costs nothing,—it is probably grown in his own garden; and if he wishes to feast his neighbours, he can regale them all on palm wine for a sum which would procure a single bottle of beer in England.'

FOOD OF THE PEOPLE.—Mr. Lockwood, the Collector, has supplied me with a memorandum on this subject, dated the 12th August 1875, which I have condensed below.

'The principal food of the people of Monghyr is composed of *bhadai* grains and fish. The *bhadai* crops are as follow, arranged

according to their prevalence or extent :—Indian corn (*Zea mays*); *marú* (*Eleusine coracana*); *urid*, a kind of *kaldí*, or pulse; *múg* (*Phaseolus mungo*); *chíná* (*Panicum miliaceum*); *kherf*, the *shámá* of Bengal (*Panicum frumentaceum*); *kodo* (*Paspalum scrobiculatum*); *bord*, a kind of runner; *kauní* (*Panicum Italicum*); *bet* (*Nymphaea lotus*). The Ganges and the numerous marshes in the north-east of *parganá* Pharkiyá supply vast quantities of fish. A list of the principal fishes found in the rivers and tanks of this District has already been given under the head of Fisheries (p. 30). The siluroids, being generally reputed unclean feeders, are not in much favour with any except the lower classes. The carps, *hilsá* and *múh*, are chiefly eaten by the upper classes, and the mullet is considered a great delicacy. As it is difficult to take this last fish with the net or rod, it is mostly speared in the rivers, or shot in the marshes, as it springs out of the shallows among the reeds into deep water. The river forms a vast fish preserve, and there appears little fear of the supply falling short, although no close season is known, and the meshes of the nets used are without restriction as to size. Moreover, there is such ample supply of food for the fish, that they grow with extraordinary rapidity notwithstanding their numbers. As an instance, I may mention that on dragging one of the Government tanks here in May, I saw at the first haul 800 carp averaging 2 lbs. a-piece landed. These were mere fry thrown in during the last rains. The average price of fish here may be put down at a penny a pound. The siluroids are much cheaper. Only yesterday I saw an angler pull out a *pangas* which turned the scale at 40 lbs. The price of this was 19 *annás*, or say one halfpenny per pound. Crocodiles or *magars*, misnamed alligators by Europeans, occasionally get caught in the fishermen's nets, and are not despised as food by the lower classes. During the famine, two huge ones were exhibited to the public, and then devoured by their fortunate captors. I have myself tasted the flesh of the *gharial*, and it certainly appeared to me unfit, from its extreme toughness, for human food. The natives, however, like it. River turtles are eaten by the lower classes, as are also land and water crabs, which are very common. The burrowing land crab affects the sides of the marshes; and in *parganá* Pharkiyá, during the cold season, its little mud forts are met with everywhere. It is said to cause much damage to the young rice plants, by nipping off the stalks. Among mammals, the Musalmáns and the pariah Hindus eat beef, but goats' flesh and mutton are in favour with most

classes. The Musáhars, or Mousers, as we should call them, catch and eat the field rat, which, feeding as it does on rice, is not unpalatable. The Santáls and other despised classes are said to eat snakes, and almost any living thing they find in the woods. Bears, when killed, are always eaten by them. The porpoise is eaten by the Tiors. Birds, with the exception of the domestic fowl, do not enter largely into the food supply, as they are more difficult to procure than mammals and fish. The lower classes, however, will eat almost any bird they can catch. It is to the fact that they are not generally eaten that may be attributed the almost total absence of specific names for birds, most natives seldom knowing more than the family name. Thus, *gláh* for all the vultures, *bas* for the hawks, *cháhá* for the Scolopidæ, *boglá* for the herons, and *murghábi* for the ducks. With respect to plants the case is different, almost every ordinary plant with medicinal or other value having its specific name well known to all.

‘The following is a list of all the food-grains consumed in the District, arranged according to their prevalence or extent:—Rice, wheat, Indian corn, gram (*Cicer arietinum*), barley, *marud*, *arhar*, *úrid*, *múg*, *chotá jantrá* or sorghum, *chindá*, *kheri*; oats, eaten mostly by horses; *masúri* (*Cicer lens*), *kurthi*, a species of pea or *Dolichos*; *kodo*, *borá*, *kauni*, and *bet* (*Nymphæa lotus*). The rice is of very good quality, and exported in considerable quantity westward; it is grown chiefly south of the Ganges on the rich loam around Shaikhpurá and Jalálábád. Beyond the Ganges little rice is grown, except to the extreme north around Bakhtiyárpur, and on the Kábar lake to the north-east. I calculate the cultivated area under the chief crops in each Subdivision as follows:—Headquarters Subdivision—total area, 1,078,400 acres: uncultivated, 272,920 acres; under rice, 288,600; under *bhadái* or *rábi* crops, or both, 347,680; under other than food crops, 169,200. Begu Sarái Subdivision—total area, 492,160 acres: uncultivated, 52,800; under rice, 13,000; under *bhadái* or *rábi* crops, or both, 327,000; under other than food crops, 99,360. Jamúí Subdivision—total area, 1,013,760 acres: uncultivated, 345,328; under rice, 446,239; under *bhadái* or *rábi* crops, 104,000; under other than food crops, 118,193. *Boro dhán* is grown in small quantities along the edges of rivers and water-courses. Although more rice than any other species of grain is grown, the mass of the people eat *rotí*, or bread made of wheat, barley, grain, Indian corn, and other grains. The upper classes even do not eat nearly so much rice as the Bengalis.

preferring wheaten and other kinds of bread. The poorer classes have two meals a day,—breakfast at noon, consisting of bread or parched grain, and dinner at seven o'clock in the evening. Besides food-grains, there is an immense variety of vegetable food consumed by the people. Cucumbers enter largely into the food supply, and are very cheap,—20 for a penny; melons are grown in great profusion on the *diárá*s in April and May; and potatoes are to be found during the cold season in every *básár*, selling as cheap as Rs. 1. 6. 10 per *man*, or four shillings a hundredweight. Radishes, *baigún* or egg plant, *rámturnál* (*Abelmoschus esculentus*), species of *sim* or *Dolichos*, and a vast variety of other plants are eaten. Many plants growing wild in every hedge are also gathered as *ság* or greens, of which I may mention *Menispermum polycarpon*. Even the troublesome wild *Boorhavia procumbens* is not despised by the lower classes.

'In speaking of the food of the District, the flower of the *mahuá* (*Bassia latifolia*) must be prominently mentioned, as it plays a very important part in the southern portion of the District, men and animals being alike fond of it. I calculate that there must be 500,000 *mahuá* trees in the District, yielding on an average a *man* of flowers each. The flowers, or, strictly speaking, the succulent petals, fall in great profusion in April and May. They are then gathered and dried, selling as low as R. 0. 15. 8 per *man*, or 2s. 9d. the hundredweight. Of fruits there is great variety. The mango in good years enters largely into the food supply. The jack, guava, and plantain play a subordinate part. Many wild fruits are eaten by the lower classes; of these the figs, particularly *Ficus glomerata*, may be mentioned. This fig, on being opened, is found full of a small parasitic fly (*Usenia*?), which again under the microscope I have found infested with parasite worms, which I can only compare in appearance to young cobras. I should think that such food cannot be wholesome. Palm fruit is also largely consumed. This District produces large quantities of *ghí* or clarified butter, which is a very important article of food among the higher classes. The spices used in the District are,—chilies or capsicum, grown in every village; coriander seed, *ajáwan* (see *Drugs*, p. 199), grown on the *diárá*s; turmeric, and several others. The people consume large quantities of *tárá*, or the fermented juice of the *tál* or palm tree, during the hot season. Country spirits, made from the *mahuá* petals, are also largely drunk,—100,000 gallons paying duty at the Government distilleries.'

During the progress of the scarcity of 1874, Major Waller, the District Superintendent of Police, drew up the following list of roots which are much eaten by the lower classes of the people, and form a valuable addition to the food supply in time of famine. He has added a description of the manner in which they are prepared for eating, and the parts of the District in which they are most found :—

(1) *Putal koura* (*Batatas paniculata*), a creeper which grows largely in the valleys between the hills and on the banks of streams. Its roots, which grow to a very large size, are much used throughout the southern parts of the District. When small, they are eaten raw, but the larger ones are boiled. They are insipid in taste, but wholesome. (2) *Gāthi* is a species of *Dioscorea* growing near the hills; its root is cut in pieces and boiled till quite soft, and then eaten; it is sweet to the taste. (3) *Tāmūl* (*Curculigo orchoides*), a small plant with a leaf like the turmeric, having a single root, which is eaten boiled, and has a rather pungent flavour. (4) *Sutāwar* (*Asparagus sarmentosus*), the root of a small prickly creeper found among the hills, which is boiled and eaten; its taste is insipid. (5) *Kheld kheli* is a root obtained from the Kharakpur jungles; it is eaten boiled, and has a rather astringent taste. (6) *Siyah mūnsli* (*Murdannia scapiflora*), the root of a small plant with a leaf like the ginger, and a single root, which is eaten boiled. (7) *Kand*, probably a species of *Arum*, has a root resembling the *sakarkand*, and of the same taste; found in the Kharakpur hills. (8) *Asar* (*Briedelia?*), a creeper found in the Jamūl hills, with two or three tubers under each plant, which are boiled and eaten. (9) *Mbrōnārd*, also *algōt*, a small creeper met with in the hill tracts, having three or four tubers under each plant, which are boiled and eaten, and have an insipid taste. (10) *Bongo* is also a small climbing plant found in the hills, with a single root, which is boiled and eaten. (11) *Ijwar*, a small tree common in the south. The bark is taken off the root, which is scraped, and the inner part boiled; its taste is rather earthy. (12) *Piska* is the root of a creeper, also found in the southern hills; it is boiled all day, and then steeped in cold water all night, and again boiled next day, when it is fit for use. (13) *Kolo*, a species of *Dioscorea*, which is very common in the southern jungles; four or six pounds weight of tubers being found under each plant. Several hundredweights are dug up and prepared together, as the process of cooking is troublesome, and much the same for a large or small quantity. The Santāls, who use this root to a con-

siderable extent, say that the steam from it when being cooked is very intoxicating; and the person attending to the boiling, when moving or touching the vessels, either covers his mouth or turns away his head. The tubers are considered poisonous if eaten raw, or before being well cooked. The roots are sliced and boiled all day, then steeped in cold water all night, being generally put in baskets and sunk in a running stream; the next day they are re-boiled and again washed several times, after which they are fit for eating. The favourite way of serving them is as follows:—After they have been boiled and washed, they are mixed with *mahud* or other fruit, and made into balls, which are ready for immediate use, or may be re-warmed. (14) *At* or *birin* is the root of a creeper found at the foot of the hills, weighing from four to six pounds. This plant also bears a small round fruit, which is used for food. The root is peeled and boiled till quite soft, and has a pleasant taste. (15) *Kakori* (*Momordica dioica*) is a creeper common in Chakál; there is a single root under each plant, which is boiled, and then peeled before eating; it is sweet and pleasant to the taste. (16) *Tond* is another creeper, in hilly parts towards the south; each plant has a single root, which is boiled whole before being eaten; it is pleasant to the taste, and said to be a wholesome, strengthening food. (17) *Gorkhindí* (*Flacourtia* or *Carissa*?) is a small tree found in the hills, which bears a small sweet fruit; the root is cooked by boiling, after which the thick bark is stripped off and the inner part eaten. (18) *Musla simul* (*Bombax Malabaricum*) is the root of the young *simul* or cotton tree, and is very commonly used as food by the jungle people in the rainy season, when it is tender and juicy. It is also regarded as a strengthening tonic; for medicinal purposes it is dried, ground into powder, and mixed with milk and sugar. The root, when used as an article of food, is boiled, and the thick bark removed. (19) *Borúni* is a small plant found throughout the hills, which bears a round fruit which is used as a vegetable; it is eaten boiled. (20) *Arud* is the root of a creeper found in the same localities, which is eaten boiled. (21) *Kand bisdrá* is the root of an aquatic plant found in the Kábar and other large marshes north of the Ganges; it is boiled, peeled, and then eaten. (22) *Karhal*, probably a species of *Nymphæa*, is common in the north of this District and in Tirhut, and very generally used. As the water of the marshes recedes and leaves the land dry, these roots, which are of con-

siderable size, are dug up, boiled, and eaten; they are pleasant to the taste. (23) *Kand gijári* and *láuk* or *lúka* are similar roots, common in *párgand* Pharkiyá. (24) *Súrki* (*Nymphaea lotus*) is the root of a very common water plant with a red flower; it is obtained in a similar manner. The seed of the flower is also collected and made into a sweetmeat called *kol-ká-laddú*, found in most confectioners' or *halwás'* stalls. It is eaten boiled; its taste is slightly pungent. (25) *Kauchúr* (*Cyperus*) is the root of a small sedge. (26) *Chichora* (*Scirpus*) is also a marsh root, and is dug up in the dry weather. A man may collect about six pounds a day, with average luck and labour. They are usually ground into a kind of flour, and made into bread or cakes, but are also eaten raw. The root of (27) *Bauhimia Vahlíi* is also eaten, but has no specific vernacular name, being merely called a *ság* or vegetable.'

THE PROCESSES OF COOKING are very simple for the poorer classes, but by no means so for those who can afford the luxuries of meat, fish, fine flour, fruit, butter, and spices. The following are some of the more ordinary methods of preparing food in use amongst both the humble and well-to-do:—The principal article of diet is the *chapáti*, which very much resembles a pancake in appearance, but is much plainer in composition, and of three kinds,—*chapáti* proper, *háth-rotí*, and *tikrí*. The *chapáti* is made of *máidd*, a fine kind of wheaten flour, which is mixed with water and formed into a solid dough. This is rolled out into very thin cakes, about six to eight inches in diameter, and then baked on a *tháwá* or *khaprí*, a round metal or earthen plate, much like a saucer in shape, and about eight to nine inches broad. It is quickly turned a few times, and is then ready for use. It may be eaten either with meat or prawns, made into a curry, or with sugar or *haluá*, a kind of confection or paste made of flour, *ghí*, sugar, and hot spices. This forms a favourite meal with the well-to-do Musalmáns. The *háth-rotí* is made of a coarser flour, and the cakes are also less thin, being about $\frac{1}{2}$ of an inch thick. It is usually eaten with pulse boiled in water with a little salt; sometimes a little onion, ginger, turmeric, and salt, together with a little *ghí*, is added, but the poor cannot always afford this addition. If pulse cannot be procured, any common vegetable or *ság* is substituted and eaten with the *háth-rotí*, after being fried with a little oil, salt, chilies, and garlic. The *tikrí*, which constitutes the principal food of the peasantry, is still thicker and smaller in size, being about four inches in diameter, and $\frac{1}{4}$ of an inch thick. It is eaten either by

itself or with pulse, vegetables, or greens, and some cheap spices. The coarse flour used in *tikri* is not necessarily wheaten, but may be made from any of the half-dozen cereals that have been already mentioned. The average daily amount of food consumed by an ordinary well-nourished adult consists of about one pound of flour or *átá* made into *háth-roti* or *tikri*, and eaten at 11 or 12 o'clock noon; and one pound of coarse rice and pulse mixed, vegetables being sometimes used instead of pulse, at 9 or 10 o'clock P.M. The flour is generally sold at from 18 to 25 *sers* for the rupee, rice from 20 to 25 *sers*, and pulse from 16 to 18 *sers*. At these rates a man would eat in the month about 12 *ánnás* or 1s. 6d. worth of flour; of rice and pulse, about 8 *ánnás* or 1s.; vegetables, a little fish, with oil, salt, onions, garlic, chilies, turmeric, 12 *ánnás* or 1s. 6d.,—giving a total of Rs. 2. 12. 0 or 5s. 6d. a month. Firewood is hardly ever bought, as the dry leaves and cow-dung found lying about are easily collected to serve this purpose.

The *kabáb*, the *kormá*, the *pilau*, and the *dupidjá* are much in use among the Musalmáns. In the *kabáb* a piece of lean meat is cut into pieces of about two inches square, and half an inch or less thick, which, mixed with curry, spice, and a little oil or *ghí*, are allowed to stand about four or five hours. The pieces are then arranged on a thin iron or wooden spit, of about eighteen inches long and $\frac{1}{8}$ inch thick, and roasted before the fire. The *korma* is a kind of curry made of meat; the other ingredients are *ghí*, onions, ginger, garlic, curds or whey, hot spice, and salt. The *dupidjá* is the same as *kormá*, only that in the latter turmeric is used and curds are not; *dupidjá* is also made of prawns, crabs, or fowls. The *pilau* is principally composed of rice, and is considered an excellent dish. About two pounds of very fine rice are taken and mixed with almonds, raisins, *chudrá*, a species of dates, hot spice, and salt. The whole is then partially fried in *ghí*, water and a soup made of meat, called *ukhní*, is added, and the whole cooked till tender; it is eaten with *kormá* curry or *dupidjá*. The *pilau* is of two chief kinds, called *míhá* or sweet *pilau*, and *zardí* or yellow *pilau*, according as sugar or turmeric is predominant. When meat is added to this, it is called *goshtpilau*; if prawns are used, its name is *chingri-pilau*; a purely vegetable dish, in which peas take the place of flesh, is called *matar-pilau*. The most peculiar dish of this kind, at least to European ideas, is when pine-apple is the chief article used. The *halud* is a confection much favoured by Musalmáns, and is as necessary to

them at the *sabráth* festival as the plum-pudding is to us at Christmas. There are two kinds, one of which is called *khursani*, the dry fried variety, and the other *nesháshtá*. The *khursani* is made by frying the *síji* or flour in *ghí*, and adding a syrup made of sugar, together with almonds, raisins, and hot spices, which are fried together till they reach a proper consistence. The *nesháshtá* is prepared by first steeping the flour in water for about twelve hours, and then straining it through a stout cloth. By this means the glutinous matter is separated from the starch, which is carried through in suspension by the water. The gluten is useless, and is thrown away. The water is allowed to stand for about three or four hours, by which time the starch settles at the bottom of the vessel, and is easily obtained by draining off the water. It is then mixed either with sugar or a syrup made of sugar and *ghí*; to this almonds, raisins, etc. are added, cut up very small, after which the whole is put in a *dekhlí* or saucepan and slowly cooked. It must be constantly stirred, as it is apt to get burnt. It is eaten with fine *chapátls*.

THE MUSICAL INSTRUMENTS of Monghyr are almost the same as those of Bhágalpur, which have been described at length in the Statistical Account of that District. The following are most in use:—The *sítár*, a guitar with steel wire strings, not unlike a violin, is played with the index finger of the right hand, which is protected by a cap of twisted wire, somewhat like a thimble, and called a *minjráf*. The *beháldá* is identical with the European violin, except that its strings vary in number from five to seven, and it is played with a bow made of horse-hair. The *sarangá* is much like the *beháldá*, but is smaller and narrower. The *sarsingár* is like the *sítár*, but highly ornamented. *Isrár* is another kind of *sítár*, but with pegs like the *sarangá*. The simplest form of stringed instrument is the *tambúrdá*, which has only one string. It is often used alone as an accompaniment to the simple recitative in which popular legends are sung, but is usually accompanied by the *kanjání*, a kind of tambourine, to which one or more *jángs* or jingling plates of brass are attached. The *úrnl* is made of a split bamboo passed through a half cocoa-nut, to which a single string of horse-hair is attached. The *ekthárdá* is like the *úrnl*, but has a wire string instead of a horse-hair one, and is somewhat larger. *Karthál* are castanets used in pairs. *Murchung* is the native name for the Jew's harp. The most complicated kind of drum is the *thablá*. It consists of what may be called two drums, called *dúgi* and *dainá*. The former is nearly

hemispherical, and is made of baked clay with the skin stretched over the top. The latter is oblong, its shell being made of wood. The skin is stretched on both ends. The player sits cross-legged on the ground, with the *dúgi* caught in the bend of his left knee, and the *dainá* resting against the outside of his right leg. The *dúgi* is beaten freely with the left hand, the *dainá* is sounded only with the fingers of the right, the palm of which is never removed from the rim of the drum. The large drum sounded at the time of worship in Hindu temples is called *mirdhan*. It is three feet high by two wide, made of baked earth, and is played with sticks. *Damrú bájd* is a small double drum, one foot high and six inches wide. The wall between the two ends is compressed to a diameter of one inch. At this point two strings of leather with knotted ends are attached. The player holds the instrument at this centre, leaving the strings free, and causes the knots to sound the drum by a rapid twisting motion of the wrist. *Jorghat* is a kind of long drum. The *surndí* is a straight bamboo with holes bored or burnt in it, and a mouthpiece like that of a flageolet. The *bonsli* is a kind of flute made of bamboo. The *jhdí* is the ordinary brass cymbal, and is often played in concert with the tambourine called *kanjáni*. A smaller kind of cymbal is called *masrá*. It is about two inches in diameter and half that in depth, not being flat like a true cymbal. The *jalthrang* is the name given to a number of brass vessels of different sizes, filled with water, which are made to produce musical sounds by being struck with two sticks, one held in each hand. An intelligent native assured me that he considered the sounds thus produced much sweeter than those of the *sitar*.

AGRICULTURE: RICE CULTIVATION.—In a District so largely composed of a rich alluvial soil as Monghyr, rice cultivation naturally forms one of the chief agricultural pursuits, although not to such an extent as in the southern portions of the Gangetic delta. The rice cultivated is divided into two main species, the *bhadai* and *aghaní*, which in their difference of character and times of sowing and reaping very nearly correspond to the *dus* and *aman* of Lower Bengal. *Bhadai* rice is represented by only a single variety, *sathí*, so called from the period between sowing and reaping being about sixty days. The land on which it grows is ordinarily high, and often, in the south of the District, where it is most cultivated, poor. It is usually sown after the *rabí* has been gathered. The number of ploughings varies from six to ten; after which, in May or

June, sown at the rate of thirty-five *seers* to the *bighá* is sown broadcast. On rich soils, as soon as the young plants are six inches high, the field is sometimes harrowed for the purpose of thinning the crop, and to clear it of weeds, but this is not often necessary. The crop is harvested in June or July. *Aghant* or winter rice is cultivated on low land, principally to the south of the Ganges, on the alluvial land north of the Darará and Lakhisarái hills, and between Shaikhpurá and Jamúí. It is sown in nursery beds in April and May; transplanted when the seedling is about six inches high, in June, July, and August; and cut in the end of November. The following thirty-three species are grown in Monghyr:—(1) *Sellá*, (2) *dolangá*, (3) *gajpatá*, (4) *káribáink*, (5) *kanakchur*, (6) *dhusrá*, (7) *sirhattá*, (8) *jongá*, (9) *bánsphul*, (10) *ghodiyá*, (11) *manjárá*, (12) *tuláphul*, (13) *tildásar*, (14) *chaudargahí*, (15) *bordá*, (16) *kamod*, (17) *rámuniyá*, (18) *kajargur*, (19) *baghpanjar*, (20) *rámduld*, (21) *sárihan*, (22) *bádsáhpasand*, (23) *rangá*, (24) *bijháli*, (25) *járiyá*, (26) *dándphul*, (27) *bhattásár*, (28) *sarahachá*, (29) *dulahri*, (30) *barásar*, (31) *khirdánt*, (32) *lohráji*, and (33) *káji*.

OTHER CEREALS.—Besides rice, wheat (*gehún*) and Indian corn (*janirá*) are the principal cereals grown in Monghyr. Wheat is a *rabi* or cold-weather crop, and is grown on land of medium elevation. The cultivators begin to prepare the land for this crop about the middle of September, when the heavy rains of the year are nearly at an end, and there is no longer any fear of such a flood as would reach the level at which it is ordinarily grown. For the first three weeks nothing but ploughing goes on, the land being broken up eight several times, with an interval of two or three days between each ploughing. The expense of this operation, at the rate of 4 *annas* or 6d. per ploughing, is Rs. 2 or 4s. for each *bighá*. After the last ploughing, the seed is scattered broadcast, thirty-five *seers* being required for the local *bighá*, which is the square of fifty-five yards. There is no further expense up to the harvest-time in March or April, except the cost of weeding, which varies very much, and may amount on rich land to as much as Rs. 3 or 6s. per *bighá*. The harvest-men, who often come from the north of the Ganges, receive one-sixteenth of the grain cut by them as remuneration for their labour. I find that this system of payment in kind is customary even within the Monghyr Municipality, money wages being almost unknown. The out-turn is from seven to ten *mans* per local *bighá*, or very nearly eight to eleven hundredweights per standard acre. The grain is

trodden out by cattle in a corner of the field cleared for the purpose,—a *meya* of eight oxen being able to tread out the produce of one *bighá* in one day, that is, between sunrise and two o'clock in the afternoon, if the day be sunny. The straw is then removed by hand, and stacked apart. The grain is separated from the chaff, if a breeze is blowing, by being poured out on the ground from a *sukh* or flat basket; otherwise, it is arranged in small piles, and the chaff blown away by a man using the *sukh* like a fan. The cost of these operations is about Rs. 1. 8. 0 or 3s. The grain is then brought home, and, after being thoroughly dried in the sun for four or five days, is stored in bags for sale or use. To prepare wheat for use, it is ground between two small millstones called *chaki* or *jántá*, which are worked alternately by two women, who sit opposite one another. One *chhaták* or two ounces of grain is put into the mill at a time. The flour or *átá* obtained has the bran or *chilká* mixed up with it. They are separated by being shaken round in a *chhálíní* or bamboo tray, when the latter comes to the top, and is easily removed. In a hundredweight of uncleaned flour, there is about ten pounds of bran.

Indian corn is a *bhadaí* crop, sown in May and reaped in the end of August or September. The land requires much preparation. The Koerís, who are the best husbandmen in the District, say that ten ploughings are necessary. These are begun immediately the *rabi* is off the ground, that is, between the middle of February and the middle of April. The ploughing, at the rate before mentioned, costs Rs. 2. 8. 0 or 5s. per *bighá*. The seed, which is sown broadcast, amounts to two *seers* to the *bighá*, and costs R. 1 or 2s. In a few days the sprouts appear above ground, and ten days after, earth is piled up round the young seedlings. Twenty days later, the same operation must be repeated. These operations are the most expensive in the cultivation of the corn, costing for the two about Rs. 4 or 8s. They fortunately have the effect of weeding the ground as well as nourishing the plant. After this, nothing more is done, except that the owner or some member of his family usually erects a platform, which he roofs in, and from which he watches during the night,—an unenviable position, as this duty extends over the two most rainy months of the year. In three months from the time of sowing, the crop is ripe, and is either cut or broken off near the root with the hand. The grain is obtained, if wanted in small quantities, by rubbing the head or *bhuttá* between the hands; if otherwise, it is trodden out by oxen, in which case the produce of a *bighá*, usually

amounting to ten *mans* or seven hundredweights, costs Rs. 2 or 4s. in cleaning. A coarse flour is prepared from Indian corn, by grinding it in the same manner as wheat, after it has been slightly roasted. Thirty-five per cent. of this flour is bran, which is separated by the same means as in the case of wheat. The bran makes excellent food for cattle.

OPIMUM.—Although the earliest record in the office of the Sub-Deputy Opium Agent of Monghyr dates only from 1839, it would appear that opium was more or less cultivated since the beginning of the century in this District. The system of cultivation in Monghyr in no way differs from that pursued in the other Districts of the Behar Agency. The operations for the year begin in July with the making the settlements with cultivating *rayats*, the issuing of licences to them, and the receiving engagements from them. The cultivators, or, as they are called, *asámts* of each village appoint amongst themselves a head-man or agent, called a *kháttáddr*, who is usually selected as being a larger opium grower, or generally better off, than his fellows. He is held responsible by Government for balances and any shortcomings, and, in consideration of this responsibility, receives a commission of R. 1 or 2s. on every *man* or eighty-two pounds weight of opium delivered by the cultivators whom he represents. He is also allowed to sell the Government and receive the price of all the opium he can scrape off the pots of the other cultivators, after their opium has been taken out for weighing and the pots scraped by the *asámts* themselves,—a perquisite of doubtful value.

As soon as the agreement has been completed and the licence granted, an advance, at the rate of 10s. per *bighá* of 3025 square yards, or 16s. per acre, is made to the *rayat*. The cultivation then begins with repeated ploughings, which are continued up to the middle of October, when manuring with ashes and cow-dung is necessary. Whenever, during the rains, much water is standing on the fields, ploughing should be suspended, as it impoverishes the soil. When the lands are ready, or about the middle of November, the early sowings may commence, and the second and third be continued during December. The seed should be of the previous year, and preserved free from damp. Previous to sowing, it should be steeped for one night in water, and sown in the morning as soon as possible after being taken out of the water. It is then scattered over the fields, mixed with fine earth, at the rate of two *seers* of the heavy *bázdár* standard per *bighá*, or 13½ lbs. per acre. If the ground

be dry, it may be irrigated with advantage prior to sowing. The day after sowing, the land should be irrigated, if this has not previously been done, and on the succeeding day ploughed and harrowed. After a week, the field should be divided into beds, six feet long by three wide, placed in consecutive rows according to the level of the ground, so that there may be no difficulty in irrigating the land with a small drain or ditch between every two beds. In low lands bordering on rivers and marshes, which retain their moisture till December, the necessity of forming beds does not exist. Wells are essentially necessary for poppy fields, and every facility and encouragement is given for constructing them wherever they are wanted. They may be dug at a very trifling cost, which is amply repaid by the increased productiveness of the land, well water seeming to have a better effect on the plants than water obtained from marshes or rivers. When the plant attains to the height of two inches, the beds, after being well irrigated, are carefully weeded and thinned, the plants to be retained being kept from three to four inches apart from each other. Two weeks afterwards, the same operations are repeated, all the sickly and superfluous plants, together with all weeds, being removed, leaving the vigorous poppy plants at distances of seven or eight inches from each other. The soil is after this dug up with a spud or hand spade, and irrigated every fortnight till the plants arrive at maturity. Care must be taken in irrigating that the water does not exceed an inch in depth, this precise amount being found to be required to give the plant sufficient moisture till the next fortnightly irrigating comes round. As soon as possible after the sowings have been completed, the subordinate officials of each *kútt* or factory, known as *muharrirs* and *mutasaddis*, proceed to the interior of the tract under their charge, and measure each field sown. This measurement, together with the name of the cultivator and his caste, are entered on the back of his licence. At the beginning of the cold weather, these measurements are tested and checked by the Sub-Deputy Agent and his Assistants when on tour. This duty forms one of the most important functions of these officers, who are expected to remain in camp till the middle of March.

About the end of January, the poppy begins to flower. The large petals are not allowed to wither, but are carefully collected in the following manner. The forefinger and thumb are placed round the stem, just beneath the pod, and the other fingers drawn inwards to

form a kind of tube. The hand is then gently raised straight over the pod, and if the petals are matured, they come away. They are never plucked off, as it would injure the pod. When a sufficient quantity has been collected in this manner, the cultivator proceeds to manufacture them into flat cakes, or, as they are termed, flower-leaves. A circular ridged earthen plate, about a foot in diameter, is placed over a slow fire; the required quantity of petals is placed in it, and pressed with a damp cloth pad till they have adhered together. The flower-leaf thus formed is then removed and allowed to dry. These leaves form the first envelope in which the soft opium for the Chinese market is enclosed, and are purchased by the factories at the rate of Rs. 5 to Rs. 10 per *man* of 82 lbs. weight, or 13s. 8d. to £1, 7s. 4d. per hundredweight, their value depending on their being free from mould, aromatic, and not over-baked. The greatest care is taken in rejecting such leaves as are charred or heated from damp, as they would affect the opium enclosed in them most injuriously.

In February and March the pods begin to ripen, maturity being shown by an increased firmness to the touch, and by their being clothed with a fine white bloom. The final sign of their being fit for incision is when juice exudes on breaking off one of the stigmas on the apex of the pod. The incisions are made with a lancet, or sometimes with two tied together. Three or four are made in a vertical direction every third day. The number of times this process is repeated varies from two to seven, according to the state of the weather, the condition of the plant, and the circumstance whether it has ripened early or late in the season. The incisions should be made after two o'clock in the afternoon, the juice being allowed to exude during the night. Early next morning the cultivator must begin to collect this with a small spoon-shaped iron scraper, for the heat of the midday sun injures it considerably. The incisions are closed by the finger being passed over them. The opium, when collected, is placed in earthen or brass vessels, slightly tilted to drain off the dew it may contain, and set aside in some ventilated and safe place. The juice of the poppy, as it exudes after the scarification of the capsule, is milky white; it oozes out slowly, and the water it contains evaporates gradually; the outer portion of the 'tear,' drying somewhat, thickens a little, and has a colour approaching to a rose red; the inner part is semi-fluid, and of a pinkish tinge. It is the aggregation of the 'tears' which gives to the opium its peculiar grain in the soft state. The opium as collected contains

about fifty per cent. of water. The quality of the opium is often endangered by the presence of a substance which presents itself under peculiar atmospheric conditions, and is known as *pasewá*. When the vessel containing the recently-collected semi-fluid exudation is placed in a position favourable to the gravitation of liquid matter, a blackish fluid, something like strong coffee, drains off. If this is carefully separated, by allowing it to drip away, or absorbing it with pieces of cloth, the drug is greatly improved; while, if it exists in any quantity, and be allowed to remain, the opium is injured in colour, texture, and aroma, its quality deteriorates, and it is unsuited to the China market, although quite pure. The most remarkable characteristic of this fluid is that it contains some of the most valuable constituents of opium,—meconic acid, resin, morphia, and narcotine. It is never present when a dry westerly wind blows, or when clouds prevent the precipitation of dew at night. The yield of opium under these circumstances is small, owing to the incisions being quickly closed up by the juice, which rapidly hardens, and is entirely free from *pasewá*. When, however, dew falls at night, the juice of the plant exudes more freely from the capsules; but, from the collection of dew, some of the exudation may become so thin as to fall to the ground and be lost. When the dew is considerable, *pasewá* is formed. Formerly this substance was found in large quantities in the cultivators' opium, and means were taken at the factories for separating it. At the present time it is never present except in very small quantities, when a fine is levied, amounting to the value of one sixty-fourth to five sixty-fourths of the whole opium affected. This is not prepared for the Chinese market, but is set aside for making *lewa*, the paste put over the best opium when it is being made up in cakes, or sold for local use.

It is unnecessary here to describe the methods of testing to which the opium is subjected in order to discover its purity and consistence. The adulterations and deteriorations to be guarded against are numerous. Amongst the former may be mentioned the starch of tubers and roots, such as the common potato (*Solanum tuberosum*), the sweet potato (*Convolvulus batatas*), the *kunda* or *urwí* (*Caladium esculentum*), the Jerusalem artichoke (*Arum campanulatum*), the yam (*Dioscorea sativa*), the fruit of the *sing-hárd* (*Trapa bispinosa*), the inspissated juice of the prickly pear (*Opuntia vulgaris*), extract of the tobacco plant (*Nicotiana tabacum*), of *Datura ferox*, and hemp (*Cannabis Indica*), the inspissated

juice of the *madar* (*Calatropis gigantea*), gums from the *Acacia Arabica*, *Ficus Indica*, *F. religiosa*, *F. racemosa*, and *F. venosa*, the resin of the *sál* (*Shorea robusta*), the pulp of the *bel* fruit (*Ægle marmelos*), the seeds of the *tolmakana* (*Anelsia spinosa*), tamarind pulp, catechu, *gáb* (*Embryopteris*), sugar, treacle, cow-dung, and earth.

Opium is classified according to its consistence,—that containing 70 per cent. of pure opium, 30 per cent. of water, and no foreign matter, being considered the standard, and paid for at the rate of Rs. 5 per *ser*, or 5s. per pound; this is known as *awal*, and distinguished by the trade mark I. The standard was fixed in 1828, when no payment was made for opium of higher consistence. In 1831 this rule was rescinded, and since then three classes above and two below the standard have come to be recognised. They are,—above the standard, *dar awal*, or opium of 73, 74, and 75 consistence, that is, having 25 to 27 per cent. of water, and valued at Rs. 5. 5. 0 per *ser*, or 5s. 3½d. per pound, and distinguished by the trade mark IXI; *bála dar awal*, or opium of 76, 77, and 78 consistence, that is, having 22 to 24 per cent. of water, valued at Rs. 5. 7. 6 per *ser*, or 5s. 5½d. per pound, and distinguished by the trade mark IXI; *besht bála dar awal*, or opium of 79, 80, and 81 consistence that is, having 19 to 21 per cent. of water, valued at Rs. 5. 10. 0 per *ser*, or 5s. 7½d. per pound, and distinguished by the trade mark IXI. And below the standard, *doem*, or opium of 67, 68, and 69 consistence, that is, having 31 to 33 per cent. of water, valued at Rs. 4. 14. 0 per *ser*, or 4s. 10½d. per pound, and distinguished by the trade mark II; and *seum*, or opium of 64, 65, and 66 consistence, that is, having 34 to 36 per cent. of water, valued at Rs. 4. 10. 0 per *ser*, or 4s. 7½d. per pound, and distinguished by the trade mark III.

There are five *kutls* or centres of supervision, usually called out-factories, although nothing is manufactured at them, subordinate to the Monghyr Sub-Agency; of which No. (5) mentioned below is situated in the District of Bhágalpur. They are—(1) Monghyr, with lands in *pargands* Monghyr, Sakhrábádí, Sikhrapah, Súrajgarha, Kajrá, Abhaipur, Parbatpára, Singhaul, Darára, Chándan Bhuká, Salmábád, and Kharakpur. (2) Jamuí, with lands in *pargands* Gidhaur, Chakái, Bisthazárl, and Parbatpára. (3) Sakandrá, with lands in *pargands* Bisthazárl, Gidhaur, and Salmábád. (4) Shaikh-purá, with lands in *pargands* Amarthu and Maldah. (5) Amarpur, with lands in *pargands* Sáhrul, Wasilá, Lakhanpur, Kherhí, Colgong,

Bhágálpur, Sakhrábádí, Kharákpur, and Jahangírá, in Bhágálpur District. The soils used for opium cultivation, and their out-turn per *bighá* of 3025 square yards, or '625 of an acre, are,—(1) *doras*, a soil of the first quality, consisting of high lands well manured, which yields from 8 to 10 *ser*s; (2) *matiyár* and (3) *káwal*, soils of the second quality, consisting of low lands, generally inundated, free from sand, and not so highly manured as the first, which yields from 5 to 6 *ser*s; (4) *kálmátí* and (5) *bálsundar*, third-rate soils, low and sandy, yielding 3 to 4 *ser*s; (6) *gurmátí* and (7) *diárá* or *zari*, fourth-rate soils, yellowish and sandy, yielding 2 to 3 *ser*s.

The total areas subject to the Monghyr Agency under opium in each year of the decennial period 1865-75, together with the amount and value of the annual out-turn, have been returned to me by the Sub-Deputy Agent as follow:—In 1865, 33,329 *bighás*, yielding 3285 *mans* of 82 lbs. weight, valued at £59,139, 8s. od.; in 1866, 35,871 *bighás*, yielding 4080 *mans*, valued at £73,441, 10s. od.; in 1867, 37,578 *bighás*, yielding 3373 *mans*, valued at £60,727, 16s. od.; in 1868 35,780 *bighás*, yielding 3382 *mans*, valued at £60,887, 8s. od.; in 1869, 37,999 *bighás*, yielding 4406 *mans*, valued at £79,315, 12s. od.; in 1870, 37,121 *bighás*, yielding 3073 *mans*, valued at £55,327, 6s. od.; in 1871, 37,865 *bighás*, yielding 3360 *mans*, valued at £73,206, 14s. od.; in 1872, 38,686 *bighás*, yielding 4754 *mans*, valued at £95,083, 8s. od.; in 1873, 33,854 *bighás*, yielding 4775 *mans*, valued at £95,513, 14s. od.; and 1874, 39,960 *bighás*, yielding 4282 *mans*, valued at £85,644, 8s. od. From 1865 to 1871 the rate paid for *awal* opium was Rs. 4. 8. 0 per *ser*, or 4s. 6d. per pound. Since the latter year, it has been increased to Rs. 5 per *ser*, or 5s. per pound. In 1874, of the total number of *bighás* under cultivation, 4547 were situated within the magisterial jurisdiction of Bhágálpur. The following items of expense were incurred during the year 1874-75:—Cost of opium, £83,055, 4s. 2½d.; cost of flower leaves, £344, os. 3½d.; salary of Sub-Deputy and Assistant Sub-Deputy Agents, £1254, 14s. 10½d.; salary of the Headquarters establishment, £196, 18s. 2d.; salary of out-factory establishments, £796, 11s. 9½d.; weighing and transit charges, £245, 3s. 3½d.; commission to clerks, £544, 6s. 4½d.; commission to *kháttadúrs*, £411, 13s. 10½d.; bonus to measurers and testers, £23, 13s. 4½d.; travelling allowances, £115, 14s. 3d.; office contingencies, £90, 18s. 11½d.; allowance for country tationery, £27, 12s. od. The opium, when tested at Monghyr and

passed, is sent on by boat to Patná, where it is again tested and made up for sale.

The Sub-Deputy Opium Agent at Monghyr has supplied me with a statement (given in a tabular form on the two following pages) showing the average profit per *bighá* that opium is supposed to yield to the cultivator, as compared with sugar-cane, potatoes, and wheat. The great profit from potatoes is remarkable, and is obtained from a very high cultivation used in the town of Monghyr by members of the Koerl caste, the best market gardeners in Behar.

THE FRUIT TREES of Monghyr District are the following. In the present state of our knowledge, it is impossible to say positively which are indigenous and which have been raised from imported seed, but it is believed that the first fifteen on the list are indigenous : —(1) The mango, or *ám* (*Mangifera Indica*), is found all over the District; but it is more common north of the Ganges and along its southern bank than in the hill tracts, where it gives place to the (2) *mahúd* (*Bassia latifolia*). The mango yield is very uncertain, but in good seasons forms a considerable portion of the food of the people in May and June. The *mahúd* tree and its products have been already described on pp. 32, 33, and p. 84. (3) Jack-fruit, or *kántál* (*Artocarpus integrifolia*), is common. (4) Plantain, *kala* (*Musa sapientum*), is found all over the District, but the fruit is of a very coarse description. (5) Palm tree, or *tál* (*Borassus flabelliformis*), is very common, and produces vast quantities of *tárl* (toddy), the fermented sap which is obtained from the peduncles cut before flowering. The *tárl* shops pay a revenue of £4820, 10s. od. yearly. It is said that many of the people subsist almost entirely on this liquor during the hot months, when it is most collected. (6) The date palm, or *khejár*, is also chiefly cultivated for the *tárl* it yields. (7) The tamarind, *imlí* or *tetúl* (*Tamarindus Indica*). (8) The *hair* (*Zizyphus jujuba*) is a favourite and common fruit. (9) *Jám* (*Eugenia jambolana*) is found in every village, and the plums are highly esteemed by the natives. (10) *Ban-jám* (*Eugenia fruticosa*). (11) *Jamrúl* (*Eugenia alba*). (12) *Guláb-jám* (*Eugenia. jambos*). (13) *Lung* (*Eugenia caryophyllata*); the fruit does not come to maturity. (14) *Amaltás* (*Embllica officinalis*); some fine trees of this species grow wild in Begu Sarái Subdivision, and are there called *aurí*. (15) The melon, or *khabuj* (*Cucumis melo*), grows in great profusion on the sandy *dídrás* bordering the Ganges, and the fruit is very cheap. (16) The

[Sentence continued on page 102.

STATEMENT SHOWING AVERAGE PROFIT PER BIGHA THAT OPIUM IS SUPPOSED TO YIELD TO THE CULTIVATOR,
AS COMPARED WITH SUGAR-CANE, POTATOES, AND WHEAT.

	Quantity of land sown.	Out-turn.				Value.				Total
		Produce.	Seed.	[Leaves.	Trash.	Produce.	Seed.	Leaves.	Trash.	
		m. s. c.	m. s. c.	m. s. c.		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Opium,	1	0 4 11½	2 32 8	0 2 3	..	2 7 2½	0 9 10	0 1 5	0 1 0½	2 19 5½
Sugar-cane,	1	30 0 0	...	...	12 bundles.	7 10 0	..	..	0 2 0	7 12 0
Potato,	1	100 0 0	...	...	...	10 0 0	...	..	...	10 0 0
Wheat,	1	10 0 0	...	...	10 baskets of bran.	1 10 0	..	...	0 4 0	1 14 0

STATEMENT SHOWING AVERAGE PROFIT PER BIGHA THAT OPIUM IS SUPPOSED TO YIELD TO THE CULTIVATOR,
AS COMPARED WITH SUGAR-CANE, POTATOES, AND WHEAT—continued.

	Rent.	Contingent Expenses.					Total Charges.	Balance or Net Profit.	Profit to <i>Karyat</i> who cultivates his own fields, deducting Rent.
		Charges for manure.	Ploughing.	Cost of Seed.	Cost of Irrigation.	Cost of Weeding and Collecting.			
Opium, . . .	£ s. d. 0 5 1½	£ s. d. 0 0 3	£ s. d. 0 8 4½	£ s. d. 0 0 7½	£ s. d. 0 11 0½	£ s. d. 0 12 9	£ s. d. 2 1 2	£ s. d. 0 18 4	£ s. d. 2 11 4½
Sugar-cane, . . .	0 14 0	0 10 0	0 8 0	0 10 0	1 8 0	2 8 3	5 18 3	1 13 9	1 13 9
Potato, . . .	0 16 0	0 2 6	0 5 0	3 12 0	0 18 6		5 14 0	4 6 0	4 6 0
Wheat, . . .	0 8 0		0 4 0	0 3 0			0 15 0	0 19 0	0 19 0

Sentence continued from page 99.]

water melon, or *tarmuj* (*Cucurbita citrullus*), is equally common. (17) Amongst figs, the fruits of *Ficus carica* or *dumar*, *F. Indica*, and *F. glomerata* are eaten by the lower classes. (18) *Citrus acida* and other species of lime, or *nebu*, when properly cultivated, come to great perfection. (19) Wood apple or *kathbel* (*Feronia elephantum*), and (20) *bel* (*Ægle marmelos*), are highly esteemed, and are found all over the District. (21) *Karanda* (*Carissa carandas*). This fruit-tree is very generally cultivated, and much used to make a jelly very like red-currant jelly, and other preserves. (22) Pine-apple, or *anands*, grows only in the south of the District. (23) The white and black mulberry, or *tút* (*Morus Indica* and *M. multicaulis*), both yield fruit in great profusion. (24) The *charmella* or *chalméri* (*Cicca disticha*) grows well, and yields abundance of fruit. (25) The *papeya* or *paplá* (*Carica papaya*). (26) The *roselle* (*Hibiscus sabdariffa*) is found in nearly every garden. (27) *Phalsá* (*Grewia Asiatica*) is in great favour with the natives. (28) Lichi (*Nephelium lichi*), introduced from China, grows well in Monghyr. (29) *Lukátú*, the loquat of Europeans (*Pierardia sapida*). (30) Custard-apple, or *dtá* (*Anona squamosa*). (31) *Nona-dtá* (*Anona reticulata*). (32) *Chaltá* (*Dillenia speciosa*), the fleshy leaflets of the ripe calyx are made into a jelly, and sometimes eaten in curries. (33) Oranges, or *kumlá-nebú* (*Citrus aurantium*), and (34) *batávi-nebu*, or pumelo (*Citrus decumana*), grown in this District, are of a very inferior description, and seldom worth eating. (35) The peach and apricot thrive indifferently. (36) The pear tree (*Pyrus communis*), *ndsh-páti*, is found in gardens, but the fruit is not good. (37) The loquat (*Mespilus japonica*) is found in most fruit gardens. (38) *Andr*, pomegranate (*Punica granatum*). (39) Guava, or *gayábbú* (*Psidium pyrifera*), grows to a large size.

THE FIBRES of Monghyr District have been specially returned to me by the Collector, Mr. Lockwood, as the following :—(1) *Rámturáí* (*Abelmoschus esculentus*), called by some Europeans lady's fingers, a mallow grown in almost every garden. The fibre is not usually extracted, although it is strong and serviceable. (2) *Patud* (*Hibiscus cannabinus*), the *meshta páti* of Bengal, also of the mallow order, cultivated for its fibre throughout the District. It is a *bhadái* crop, and is generally grown on the borders of the Indian-corn fields; the intention being to deceive straying cattle, who, finding such unpalatable fodder at the edge of the field, leave the more tasty crop

inside uninjured. The fibre is of excellent quality, and takes the place of jute, which is not produced in Monghyr. There are several other species of *Hibiscus* yielding fibres found wild in the District, but they are all inferior to *patud*. (3) *San*, or hemp (*Crotalaria juncea*), a leguminous plant, grown in patches in nearly every village both as an autumn and cold-weather crop. The fibre is called *kashmiri*, and, not being readily injured by immersion in water, is used for fishing-nets and well ropes. (4) The bark of the root of the *pals* (*Butea frondosa*) gives a very tough fibre, and is used for caulking boats. (5) *Maddar* or *dkhanda* (*Calotropis gigantea*), one of the *Asclepiadaceæ*, is plentiful; but its fibre, although good, is seldom or never extracted. (6) *Cannabis sativa*, the *ganj* of Bengal, is not cultivated in Monghyr; but it is found wild in most places, and is smoked under the name of *bharg*. The fibre is seldom if ever extracted. (7) Cocoa-nut palm (*Cocos nucifera*) is not common, only a few straggling trees being seen here and there. (8) The *tal* (*Borassus flabelliformis*), a palm, is abundant, but its fibre is not much used. (9) *Pandanus odoratissimus*, the screw pine, is not unfrequently met with in the south of the District, in *parganas* Chakali and Gidhaur. Formerly many of these trees used to grow near the Sitakund hot springs, three miles east of Monghyr, but they were cut down in order to dislodge the snakes they harboured amongst their roots. The fibre is not collected. (10) Plantain, or *kela* (*Musa sapientum*), is common everywhere, but the use of its fibre is not known. (11) American aloe (*Agave Americana*) is very common, being used generally as a fence to keep cattle out of cultivated lands. Its fibre is occasionally gathered, but is of no commercial importance. (12) There is also a grass, seemingly an *Andropogon*, whose fibre is very extensively used, called *sab*, found in the jungles in the south of the District. (13) *Tisi*, or flax (*Linum usitatissimum*), is not cultivated for its fibre. (14) The fibre of *Bauhinia Vahlia* has been mentioned amongst jungle products (p. 33).

AREA, OUT-TURN OF CROPS, ETC.—The area of the District of Monghyr, as specially returned to me by the Boundary Commissioner of Bengal on the 8th March 1875, is 3922 square miles, or nine square miles in excess of the area given in the Census Report of 1872. This difference is due to the transfer of a few villages, in 1874, from Bhagalpur to this District. According to the Revenue Survey, which was completed in September 1847, the District contained an area of 3336.32 square miles, exclusive of *parganas* Kabkhand and

Utarkhand, which were transferred to Bhágalpur in 1864, and contained 263 square miles. Of this total, 1606·47 square miles lay north of the Ganges, and 1729·85 to the south. In the northern division, the total amount of waste and uncultivable land was 103,496·20 acres, consisting of 93,118·80 acres occupied by rivers and water channels; 543·20 by tanks, ponds, and reservoirs; 9813·20 by village sites; and 21·00 by other water-courses. The cultivable but uncultivated land amounted to 337,722·20 acres, comprising 91,674·89 acres of marshes; 450·10 of forest and jungle; 226,016·53 of grass jungle; 17,952·68 of mango topes; and 1627·70 of road. The total area under cultivation amounted to 586,958·32 acres, as against 441,218·40 acres uncultivable or uncultivated. South of the Ganges, the waste and uncultivable land was returned by the Revenue Surveyor at 180,869·55 acres, consisting of 122,062·68 acres of hills, rocks, ravines, or stony ground; 37,749·89 of rivers and water channels; 3958·37 of tanks, ponds, and reservoirs; 15,359·13 of village sites; other water-courses, 1739·48. The cultivable but uncultivated land amounted to 201,456·16 acres, comprising 491·02 acres of marshes; 191,310·27 of tree jungle; 667·90 of grass jungle; 7484·47 of mango topes; and 1502·50 of road. The total area under cultivation amounted to 724,810·62 acres, as against 382,325·71 acres uncultivable or uncultivated. The totals for the whole District were 2,135,313·05 acres, thus divided :—Uncultivable, 284,365·75 acres; uncultivated, 539,178·36; and cultivated, 1,311,768·94.

In a report dated 20th August 1875, the Collector, Mr. Lockwood, furnished me with the following special returns of cultivation, and of the areas under food and other crops, derived from information collected by himself chiefly during the scarcity of the previous year :—‘Total acreage of the Headquarters Subdivision, 1,078,420 acres, consisting of 805,480 acres of cultivated land; 192,920 of uncultivable land, including village sites; and 80,000 of land uncultivated, but capable of cultivation. Total acreage of the Begu Saráí Subdivision, 492,160 acres, consisting of 439,360 acres of cultivated land; 42,800 of uncultivable land, including village sites; and 10,000 of land uncultivated, but capable of cultivation. Total acreage of the Jamúí Subdivision, 1,013,760 acres, consisting of 668,432 acres of cultivated land, of which 386,753 are under non-food crops, such as poppy, indigo, castor-oil, linseed, mustard, and fibres; 295,328 acres of uncultivable land, including village sites; and 50,000 of land uncultivated, but capable of cultivation.’ He adds :

'There is very little land which would yield crops, if well cultivated, manured, watered, and drained, that is not already under cultivation.' The areas of the various food staples are returned in the order of their extent, thus:—'*Aghani* rice, 742,839 acres; wheat, 165,432 acres; gram, 137,860 acres; *khesári*, 124,074 acres; peas, 110,288 acres; barley, 96,502 acres; *arhar*, 68,930 acres; oats, 41,358 acres; *másuri*, 27,572 acres; *kurthi*, 27,572 acres. The preceding are *rabi* crops. Indian corn, 151,646 acres; *marud*, 82,796 acres; *urid*, 68,930 acres; *múg*, 55,144 acres; *chotá janírd*, 55,144 acres; *chínra*, 41,358 acres; *kheri*, 41,358 acres; *kodo*, 27,572 acres; *bara kalai*, 27,572 acres; *kauni*, 13,786 acres; *boro* pulse, 13,786 acres; and *boro* rice, 5000 acres. These form the *bhadaí* harvest. I estimated that 600,000 acres are under two crops, and therefore the area of the District was increased by that amount before making the above calculations.' He further remarks: 'In giving the areas under the various crops in Monghyr, a difficulty as to accuracy at once presents itself, in the fact that, with the exception of rice, few of the crops are grown singly. As many as five or six species may be seen growing mixed up together in the same field, as wheat or barley with linseed; mustard, gram, *khesári*, *másuri*, and safflower. This system, I believe, is better suited to the inundated lands than any other, and may be called a kind of *assolement* system, such as is practised in Belgium. It may also be mentioned that, although a *bhadaí* crop is sown all over the *diárá*s and other inundated lands subjected to the spill of the Ganges, the sowing is little more than a speculation, in the hope that the crop will be reaped oftener than once in five or six years, as the flood usually comes before the crop is ripe. Although the full ripe *bhadaí* crop is seldom reaped in such lands, covering, I estimate, 100,000 acres, yet sufficient of the young crop for feeding cattle, etc. is generally secured to save the sower from actual loss. Rice is generally sown alone; but *khesári* and gram are scattered broadcast in the rice fields as they are drying up at the end of the rains, and form a scanty *rabi* crop, reaped a couple of months after the main crop is cut.' The areas under non-food crops are:—Mustard, 150,000 acres; linseed, 50,000 acres; castor-oil, 50,000 acres; poppy, 28,800 acres; indigo, 28,000 acres; tobacco, 20,000 acres; *tíl* (*Sesamum*), 15,000 acres; cotton, 12,000 acres; *patuá* (*Hibiscus cannabinus*), 10,000 acres; *san*, or hemp, 5000 acres; and various, 17,953 acres. Total area under non-food crops, 386,753 acres. I fear that most of the above figures are

founded on very insufficient data. In the case of indigo, a return, derived from the European planters themselves, shows the area under cultivation to be 16,000 *bighds* of the large size in use on the north of the *Comanges*, or about 10,000 acres.

CONDITION OF THE PEASANTRY.—In 1871, the Collector, Mr. Barlow, supplied me with the following facts concerning the material position of the cultivating classes. A holding over twenty-five acres of land would, ordinarily speaking, be considered an unusually large one, though holdings of thirty-three to one hundred acres in the possession of actual cultivators exist; less than four acres would be looked upon as very small. A farm of twelve acres, under average conditions of situation and fertility, can comfortably support a husbandman. On an average, a pair of oxen can plough five acres; but in a light soil eight acres may be managed, whilst in heavy ground only three can be kept in thorough cultivation by a single pair. A tenant holding so small a farm as four acres would not be as well off as an ordinary petty retail shopkeeper; and the Collector thinks that, considering the uncertainties of agriculture and of the temper of a landlord, a man with a fixed income of Rs. 8 or 16s. a month is in a more favourable position than such a farmer. The cultivators generally are said to be in debt to their landlords for rent, and on account of advances of grain for consumption or seed. The advance is repaid at harvest-time in kind, with an addition of from thirty to fifty per cent. as interest. According to the estimates of the Sub-divisional officer, the proportion of occupancy tenants is supposed to be 25 per cent., and of tenants without liability to enhancement of rent, 6·25 per cent. of the general body of the cultivators. The Collector, however, considers these figures as little better than guess-work. His opinion is that other forms of holding than mere tenancies at will are few, and 'beyond doubt those established by law to be of the superior class are not worthy of account. This District is not one in which the provisions of Act x. of 1859 have borne much fruit, as is proved by the Record Keeper's report that there have been no cases at all under sections 2, 3, and 6; but in trials in cases under sections 13 and 23, where the question of occupancy was raised, 435 were decided against, and 155 in favour of the *rayats*.' There are a very few cases in Monghyr of small proprietors who own, occupy, and cultivate their hereditary lands without either a landlord above or sub-holders and labourers beneath them.

In 1875, the Collector, Mr. Lockwood, did not give a more

favourable account. In his Administration Report for 1874-75 he writes: 'There is so much competition for land, that it is generally rack-rented, and I never heard of a rich cultivator of the soil. There appears little doubt that so great is the demand, that a good deal of land, which ten years ago was considered not worth cultivation, has during the past two or three years been broken up. I may mention the broad belt of land adjoining the Kharakpur hills west of the Kharakpur road, and a very considerable area to the north-west of Pharkiyá, and throughout the central parts of that *parganá*. On inquiring from *rayats* there, I was informed that indigo cultivation had driven out a good many from the villages south of Baliyá, and forced them to till the land towards the north. The jungle lands, conspicuous in the Survey maps in Pharkiyá, are now very generally studded with fields of corn.'

THE DOMESTIC ANIMALS of Monghyr used for purposes of agriculture are chiefly oxen. Buffaloes are also employed on the north of the Ganges. Cows are never used. The Musalmáns would be willing enough to employ them, but Hindu feeling is too strong. Ponies and asses are also domesticated. Horses are very few. Buffaloes, oxen, cows, sheep, goats, and pigs are reared and sold for food. There is a considerable trade in sheep with Lower Bengal. The value of an ordinary pair of buffaloes is said to be Rs. 35 or £3, 10s. od.; of oxen, Rs. 40 or £4 per pair; of cows, Rs. 8 to Rs. 16 or 16s. to £1, 12s. od. each; of sheep, Rs. 25 to Rs. 40 or £2, 10s. od. to £4 per score; of goats, Rs. 12 to Rs. 15 or £1, 4s. od. to £1, 10s. od. per score; of pigs, Rs. 75 to Rs. 80 or £7, 10s. od. to £8 per score. The Collector, in his Administration Report for 1873, thus describes the cattle of the District:—'Every one who has travelled through this District must have been struck with the miserable condition of the cattle. Their only chance of getting a good meal is by trespassing and eating the growing crops, their usual fodder consisting of the scanty grass which grows along the roadside, and the weeds which spring up among the stubble after the crops have been cut. It would be a happy day for the cattle of Bengal, if, as in other countries, a certain portion of the village was set apart for common grazing-ground, but the country is so thickly populated, that every available *bighá* is required to grow food for man. The cattle to the south of the Ganges are perhaps somewhat better off than those on the northern side, as there is generally a good supply of leaves among the hills. Disputes origi-

nating in cattle-trespass are at the bottom of a large proportion of criminal cases. The plan followed in some places, of giving a watchman the border of the field for himself after the plants have sprung up, is perhaps the best device for diminishing trespass; for if the watchman slumbers at his post, his own property is the first to suffer.'

THE AGRICULTURAL IMPLEMENTS are as follow.—The *hál* or plough, which consists of five parts,—the *phál* or share, a triangular piece of iron attached to the lower end of the plough, which is connected by the *hális* to a cross bar to which the cattle are yoked and which is called the *pálu*; the *pariháthá* or *lagná* is the after portion of the plough, by which the ploughman guides it as it moves; the *hál*, from which the whole plough derives its name, is a small piece of wood uniting the *phál* with the *hális*, the former fitting into a groove in it. The *koddál* is a spade whose blade is inclined at an acute angle to the handle, and which is wielded like a pickaxe. The *khurpi* or spud is a trowel-like implement about three inches broad, used for weeding. The *hasud* is a kind of curved knife without teeth, used in cutting grass or standing grain. When it is armed with teeth it is called *kachiyá*. The *chauki* is an implement which corresponds to some extent to the English harrow in its uses, and is formed of a plank about 8 feet long, 8 inches broad, and 2 inches thick, with chains attached to each end, by means of which it is connected with a *pálu* or yoke detached from a plough. One or two men stand on it to guide the oxen, and to increase its breaking force by their weight. One of each of the foregoing implements and a pair of oxen are required to cultivate a 'plough' of land, consisting of fifteen *bighás*, or five acres. The whole would cost about Rs. 45 or £4, 10s. od.; but with oxen of an inferior quality, which would not be able to cultivate more than ten *bighás* of land, the cost would be lessened to Rs. 32. 8. 0 or £3, 5s. od.

THE WAGES OF LABOUR have considerably increased of late years, having in some cases almost doubled. The following rates were officially furnished to me in 1870 by the Collector, and, judging from other estimates I have received and inquiries I have made, are correct or very nearly so. Coolies were returned as earning an average daily wage of $1\frac{1}{2}$ to 2 *annás* ($2\frac{1}{2}$ d. to 3d.) a day. The employment and remuneration of these men is uncertain, but the above may be taken as the wage for which porters and road-labourers might be employed. Agricultural day-labourers, when remunerated in kind

received 2 *seers* (4 lbs.) of grain or 2 *ánnás* (3d.) a day. The Collector does not specify the grain he refers to, or whether it is husked or not. Smiths received 4 *ánnás* (6d.) a day; bricklayers and carpenters, 4 to 6 *ánnás* (6d. to 9d.) a day. Formerly, about 1860, the daily pay of a coolie was 1 *ánná* (1½d.); day-labourers earned the same; smiths, 2 *ánnás* (3d.); bricklayers, 3 to 4 *ánnás* (4½d. to 6d.); and carpenters, 2 to 3 *ánnás* (3d. to 4½d.).

PRICES OF FOOD.—The ordinary *bászár* rate for the best cleaned rice in 1856, the earliest date for which the Collector could obtain information, was Rs. 1. 14. 6 a *man*, or 5s. 4d. per hundredweight; in 1860 it had risen to Rs. 3. 5. 4 a *man*, or 9s. 4d. per hundredweight; the maximum price reached in 1866, during the famine, was Rs. 6. 10. 8 a *man*, or 18s. 8d. per hundredweight. In 1870, prices had fallen to Rs. 2. 8. 0 a *man*, or 7s. per hundredweight; so that the price of the finer kinds of rice had not advanced during the decade preceding 1870. The common quality of rice, in 1856, was sold at Rs. 1. 11. 10 a *man*, or 4s. 10½d. per hundredweight; and in 1860, at Rs. 1. 8. 8 a *man*, or 4s. 3½d. per hundredweight; the highest price in 1866, during the famine, was Rs. 5. 5. 4 a *man*, or 14s. 11d. per hundredweight. In 1870 the price was Rs. 1. 12. 5 a *man*, or 4s. 11¾d. per hundredweight, very nearly the same as fourteen years before. Common unhusked rice, in 1860, fetched R. 1. 0. 0 per *man*, or 2s. 9½d. the hundredweight; in 1866 this price was nearly quadrupled, Rs. 3. 1. 3 per *man*, or 8s. 7½d. per hundredweight, being paid during the summer months; in 1870 the price was Rs. 1. 1. 3 per *man*, or 3s. 0¾d. per hundredweight. Unshelled barley, in 1856, cost R. 0. 15. 1 per *man*, or 2s. 7½d. per hundredweight; in 1860, Rs. 1. 1. 10 per *man*, or 3s. 1½d. per hundredweight; in the 1866 famine, Rs. 2. 13. 9 per *man*, or 8s. per hundredweight; and in 1870, Rs. 2. 3. 7 per *man*, or 6s. 2½d. per hundredweight. Indian corn, in 1856, sold at Rs. 1. 5. 4 per *man*, or 3s. 8¾d. per hundredweight; in 1860, at Rs. 1. 6. 5 per *man*, or 3s. 10½d. per hundredweight. The maximum price in 1866 was Rs. 3. 5. 4 per *man*, or 9s. 4d. per hundredweight; and in 1870 the average rate was Rs. 1. 3. 8 per *man*, or 3s. 4¾d. per hundredweight, or cheaper than in 1856. Wheat, in 1856, cost Rs. 1. 9. 7 per *man*, or 4s. 5¾d. per hundredweight; in 1860, Rs. 1. 13. 2 per *man*, or 5s. 1d. per hundredweight; it rose in 1866, during the famine, to Rs. 4. 3. 4 per *man*, or 11s. 9½d. per hundredweight; and in 1870 sold for Rs. 3. 3. 2 per *man*, or 8s. 11½d. per hundredweight. Sugar-cane, in 1860, cost Rs. 10. 0. 0 per *man*,

or £1, 8s. od. per hundredweight; its maximum price in 1866 was Rs. 12. 4. 11 per *man*, or £1, 14s. 5½d. per hundredweight; and in 1870, Rs. 13. 5. 4 per *man*, or £1, 17s. 4d. per hundredweight.

The following figures for 1874, the last famine year, and 1875 are derived from the *Calcutta Gazette*, verified by the figures in the Collector's office. In January 1874 the cost of rice was 11½ *sers* per rupee, or 9s. 8¾d. per hundredweight; wheat, 13½ *sers* per rupee, or 8s. 3½d. per hundredweight; Indian corn, 14 *sers* per rupee, or 8s. per hundredweight; and pulses, 14 *sers* per rupee, or 8s. per hundredweight. In January 1875, rice, 19½ *sers* per rupee, or 5s. 5¾d. per hundredweight; wheat, 19½ *sers* per rupee, or 5s. 8¾d. per hundredweight; Indian corn, 26 *sers* per rupee, or 4s. 3¾d. per hundredweight; pulses, 15 *sers* per rupee, or 7s. 5½d. per hundredweight. In February 1874 the price of rice was 11½ *sers* per rupee, or 9s. 8¾d. per hundredweight; wheat, 12½ *sers* per rupee, or 8s. 11½d. per hundredweight; Indian corn, 14 *sers* per rupee, or 8s. per hundredweight; pulses, 14 *sers* per rupee, or 8s. per hundredweight. In February 1875, rice, 18½ *sers* per rupee, or 6s. 0½d. per hundredweight; wheat, 16½ *sers* per rupee, or 6s. 9¾d. per hundredweight; Indian corn, 26 *sers* per rupee, or 4s. 3¾d. per hundredweight; pulses, 15 *sers* per rupee, or 7s. 5½d. per hundredweight. In March 1874, rice, 11½ *sers* per rupee, or 9s. 8¾d. per hundredweight; wheat, 13½ *sers* per rupee, or 8s. 3½d. per hundredweight; Indian corn, 14½ *sers* per rupee, or 7s. 8½d. per hundredweight; pulses, 12 *sers* per rupee, or 9s. 4d. per hundredweight. In March 1875, rice, 18½ *sers* per rupee, or 6s. 0½d. per hundredweight; wheat, 17½ *sers* per rupee, or 6s. 4¾d. per hundredweight; Indian corn, 25 *sers* per rupee, or 4s. 5¾d. per hundredweight; pulses, 16 *sers* per rupee, or 7s. per hundredweight. In April 1874, rice, 12½ *sers* per rupee, or 8s. 11½d. per hundredweight; wheat, 13½ *sers* per rupee, or 8s. 3½d. per hundredweight; Indian corn, 14½ *sers* per rupee, or 7s. 8½d. per hundredweight; pulses, 12 *sers* per rupee, or 9s. 4d. per hundredweight. In April 1875, rice, 16½ *sers* per rupee, or 6s. 9¾d. per hundredweight; wheat, 19½ *sers* per rupee, or 5s. 8¾d. per hundredweight; Indian corn, 23 *sers* per rupee, or 4s. 10¾d. per hundredweight; pulses, 16 *sers* per rupee, or 7s. per hundredweight. In May 1874, rice, 10½ *sers* per rupee, or 10s. 8d. per hundredweight; wheat, 15 *sers* per rupee, or 7s. 5½d. per hundredweight; Indian corn, 15½ *sers* per rupee, or 7s. 2¾d. per hundredweight; pulses, 12 *sers* per rupee, or 9s. 4d. per hundredweight. In May 1875, rice, 16½ *sers* per rupee,

or 6s. 9½d. per hundredweight ; wheat, 21 *seers* per rupee, or 5s. 4d. per hundredweight ; Indian corn, 26 *seers* per rupee, or 4s. 3½d. per hundredweight ; pulses, 17 *seers* per rupee, or 6s. 7d. per hundredweight. In June 1874, rice, 10½ *seers* per rupee, or 10s. 8d. per hundredweight ; wheat, 14½ *seers* per rupee, or 7s. 8½d. per hundredweight ; Indian corn, 15 *seers* per rupee, or 7s. 5½d. per hundredweight ; pulses, 12 *seers* per rupee, or 9s. 4d. per hundredweight. In June 1875, rice, 16½ *seers* per rupee, or 6s. 9½d. per hundredweight, wheat, 18½ *seers* per rupee, or 5s. 10d. per hundredweight ; Indian corn, 28 *seers* per rupee, or 4s. per hundredweight ; pulses, 16 *seers* per rupee, or 7s. per hundredweight. In July 1874, rice, 11 *seers* per rupee, or 10s. 2d. per hundredweight, wheat, 15½ *seers* per rupee, or 7s. 2½d. per hundredweight ; Indian corn, 16½ *seers* per rupee, or 6s. 9½d. per hundredweight ; pulses, 13 *seers* per rupee, or 8s. 7½d. per hundredweight. In July 1875, rice, 17½ *seers* per rupee, or 6s. 4½d. per hundredweight ; wheat, 17½ *seers* per rupee, or 6s. 4½d. per hundredweight ; Indian corn, 28 *seers* per rupee, or 4s. per hundredweight ; pulses, 16 *seers* per rupee, or 7s. per hundredweight. In August 1874, rice, 10½ *seers* per rupee, or 10s. 8d. per hundredweight ; wheat, 15½ *seers* per rupee, or 7s. 2½d. per hundredweight ; Indian corn, 16½ *seers* per rupee, or 6s. 9½d. per hundredweight, pulses, 15 *seers* per rupee, or 7s. 5½d. per hundredweight. In August 1875, rice, 16 *seers* per rupee, or 7s. per hundredweight ; wheat, 17½ *seers* per rupee, or 6s. 4½d. per hundredweight ; Indian corn, 26 *seers* per rupee, or 4s. 3½d. per hundredweight pulses, 15 *seers* per rupee, or 7s. 5½d. per hundredweight. In September 1874, rice, 12½ *seers* per rupee, or 8s. 11½d. per hundredweight, wheat, 15½ *seers* per rupee, or 7s. 2½d. per hundredweight, Indian corn, 22 *seers* per rupee, or 5s. 1d. per hundredweight ; pulses, 14 *seers* per rupee, or 8s. per hundredweight. In September 1875, rice, 16½ *seers* per rupee, or 6s. 9½d. per hundredweight ; wheat, 18½ *seers* per rupee, or 6s. 0½d. per hundredweight ; Indian corn, 25 *seers* per rupee, or 4s. 5½d. per hundredweight ; pulses, 15 *seers* per rupee, or 7s. 5½d. per hundredweight. In October 1874, rice, 13½ *seers* per rupee, or 8s. 3½d. per hundredweight ; wheat, 16½ *seers* per rupee, or 6s. 9½d. per hundredweight ; Indian corn, 25 *seers* per rupee, or 4s. 5½d. per hundredweight ; pulses, 15 *seers* per rupee, or 7s. 5½d. per hundredweight. In October 1875, rice, 16½ *seers* per rupee, or 6s. 9½d. per hundredweight ; wheat, 18½ *seers* per rupee, or 6s. 0½d. per hundredweight ; Indian corn, 29 *seers* per rupee, or 3s. 10½d. per hundredweight ;

pulses, 15 *seers* per rupee, or 7s. 5½d. per hundredweight. In November 1874, rice, 12½ *seers* per rupee, or 8s. 11½d. per hundredweight; wheat, 16½ *seers* per rupee, or 6s. 9¾d. per hundredweight; Indian corn, 24 *seers* per rupee, or 4s. 8d. per hundredweight; pulses, 14 *seers* per rupee, or 8s. per hundredweight. In November 1875, wheat, 18½ *seers* per rupee, or 6s. 0¾d. per hundredweight; Indian corn, 29 *seers* per rupee, or 3s. 10¾d. per hundredweight; pulses, 15 *seers* per rupee, or 7s. 5½d. per hundredweight. In December 1874, rice, 16½ *seers* per rupee, or 6s. 9¾d. per hundredweight; wheat, 17½ *seers* per rupee, or 6s. 4¾d. per hundredweight; Indian corn, 33¾ *seers* per rupee, or 3s. 3¾d. per hundredweight; and pulses, 15 *seers* per rupee, or 7s. 5½d. per hundredweight. In December 1875, rice, 17½ *seers* per rupee, or 6s. 4¾d. per hundredweight; wheat, 22 *seers* per rupee, or 5s. 1d. per hundredweight; Indian corn, 31½ *seers* per rupee, or 3s. 7d. per hundredweight.

LOCAL WEIGHTS AND MEASURES.—The standard of weight most in use in the town of Monghyr, for weighing both grain and liquids, is that based on the *ser* of 84 *toldís*. The most common linear measure is a yard or *gaz* of 2½ *háths* or cubits of 18 inches. The 80 *toldí ser* is used in many markets north of the Ganges. The standard of land measure is the same for most of the *parganá*s south of the Ganges, being a pole or *lagá* of five and a half *háths*. The local *bighá* in use is, therefore, equivalent to an area of 3025 square yards, or '625 of an English acre. In Kapá and Gidhaur, however, the pole measures 6 *háths*, and the local *bighá* 3600 square yards, or '744 of an acre. In Chakáí, the pole is the largest in the District, being 7 *háths*, or 10½ yards, giving a local *bighá* of 4900 square yards, or 1'011 of an acre. On the north of the river, nearly every *parganá* has a standard of its own, and different standards are often met with in the same *parganá*. The following are the most prevalent in each:—In *parganá*s Akbarpur-Ráni, Imádpur, Malkí, Masjídpur, and Naipur, the pole measures 5½ *háths*, and the local *bighá* consists of 3206 square yards, or '668 of an acre. In *parganá*s Beliyá and Bhúsári, the standard is a 6-*háth* pole; and in *parganá*s Báda, Bhúsári, and Pharkiyá, a 6½-*háth* pole, which gives a local *bighá* of 4225 square yards, or '830 of an acre.

LANDLESS DAY-LABOURERS are very numerous in Monghyr District. Mr. Lockwood, the Collector, reported in 1874 that 'the lands in this District are chiefly cultivated by *kamíds*, who are in point of fact bondmen to the landholder. They belong to the

lowest castes, particularly Musáhars and Dosádhs. I doubt whether there is a single Musáhar in the District who is not a bondman. I have asked many of them, and received the same reply from all. It appears to be the custom for every low-caste man, directly he arrives at the age of puberty, and wants a wife, to receive a few rupees under the name of a loan from the village landholder, and execute a bond similar to that annexed, which I procured at a village near Jamúí, and is a fair specimen of its class. It is said that not only are the bonds never liquidated, but that the landholder would refuse to accept the money if tendered; and, so far as I can learn, the simple clown gets so confused regarding what is due in shape of compound interest, that it never enters his head to liquidate his debt. These bondmen are paid about Rs. 1. 6. 0 or 2s. 9d. per mensem, and the interest of the bond is also nominally taken out in work. The *kamiás* are a lean race, and the wonder is how it is they manage to subsist with their scanty clothing and insufficient food. But their women all take their share in labour, and the Government roads, *samlindári* embankments, and wood-cutting keep them from starvation. I have on many occasions urged them to emigrate, but they plead that their masters will not let them go, and that they prefer the ills they have rather than to fly to others they know not of.' The bond referred to is as follows, and is a remarkable instance of the ignorance among the lower classes of what the English law has done for them:—'Agreement between A. B., a Musáhar of village Mablepur, *parganá* Parbatpur, *zila* Monghyr, on the one hand, and Bábu C. D., Rájput, on the other. In consideration of receiving Rs. 5 in cash, to celebrate his marriage, A. B. hereby binds himself to plough, sow, irrigate, and reap the fields of C. D., and perform faithfully all the duties of a *kamid* or bondman. The said A. B. binds himself to continue in the service of his master, C. D., and never to refuse doing any work imposed on him: morning and evening, day and night, he will be present and ready to work, and he will never absent himself even for a visit to a friend or relation without leave. If on any occasion the said A. B. should absent himself, that day's work will be placed to his debit, and he will be liable for such damages as Her Majesty's courts of law may direct. In addition to the above duties, the said A. B. binds himself to furnish the said C. D. with the following commodities, as may be directed by a council of peers of the said C. D.:—thatching grass, bamboos, strings, woods, and other things (*waghaira*). This deed

is executed in good faith, 22d Assar 1265 (that is, the 18th July 1858).' The amount, Rs. 5 or 10s., was unredeemed in 1874, after sixteen years' service.

The occupation returns of the Census Statement for Monghyr give the number of adult male labourers at 128,672, but this does not represent the entire number of persons dependent on the wages of daily labour. The caste returns show that there are 112,585 Musáhars, 99,312 Dosádhs, and 10,769 Doms, or a total of 222,666, scarcely any of whom own any land. It is on this immense class that scarcity readily tells with all the force of famine. Their means of subsistence is the most precarious, at the same time that their numbers render any system of relief a matter of the greatest difficulty. There is much evidence, besides that of the Collector just quoted, to show that not more than five per cent. of these castes own any land.

THE LAND TENURES of Monghyr scarcely differ from those of the neighbouring District of Bhágalpur, which I have described at length in the Statistical Account of that District. That such is the case might be expected, from the fact that most of the land of the two Districts was owned by the same proprietors at the time that the English took possession of Behar, and that it continued for sixty years after subordinate to the same revenue supervision. The latter fact may not seem at first sight to be sufficient cause to induce or preserve a similarity of tenures in both, but it must be remembered that a similar result has been produced by this cause in other parts of Bengal. English Districts, at the time of their foundation, if they did not exactly coincide with the existing revenue divisions, were made to follow boundaries fixed by fiscal considerations; and these considerations were probably connected with a similarity in the modes of land-holding, which resulted in similarity of revenue procedure. When the English preserved these divisions, as in the case of Bhágalpur and Monghyr, till forty years after the Permanent Settlement, the tenures of both remained alike through all the troubles of our early land administration, which scarcely would have been the case if they had been formed into separate Districts from the beginning of our rule. This theory does not overlook the fact that parts of Monghyr are derived from Tirhut and Gayá. With the exception of *parganá* Pharkiyá, which was down to very recent times an entirely uncultivated swamp, these additions have been so small that they may be left out of consideration. Moreover, such *parganá*s

south of the Ganges were parts of the same political divisions as the territory known as the Mahálát Kharakpur, even prior to the creation of that great estate, and were afterwards mostly held *ghátwáli* on the same conditions. The following description of the land tenures of Monghyr District, whilst noticing the more remarkable forms, is intended only to supplement that given in my Account of the parent District of Bhágálpur. It is principally derived from a special report by the Collector of Monghyr, dated the 21st December 1874, and uses a system of grouping different from that which I have followed in my account of the Bhágálpur tenures.

All tenures may be divided into estates in chief, that is, subordinate to the Government alone; and subordinate tenures, which form part of an estate in chief. The first may be subdivided into estates subject to the yearly payment to the State of a fixed revenue, and estates which for various reasons have been exempted from this payment. Subordinate tenures are similarly distinguished, according as they pay or do not pay rent to the landholders in chief; the rent-paying tenures are again divided into those held by middlemen with permanent or temporary rights, and those held by actual cultivators of the soil, who also may have rights of occupancy for ever, or for a fixed period, or may be simply tenants at will. Revenue-paying estates are subdivided as follows in the Collector's report:—

(1) ZAMINDARIS are the highest form of estates in chief, and existed long before the English undertook the administration of the country. In Monghyr they are all permanently settled, and differ little from a great English property, except in their payment of Government revenue. Their ~~exact~~ position in the economy of the State was accurately defined in the Regulations of 1793. Their number is 3180. (2) *Ghátwálls* were originally revenue-free service tenures, granted in the time of Musalmán supremacy to the petty hill chieftains on the southern frontier, on condition of their preventing raids by the hill-men of Rámgarh and Western Santálá on the low-lying and cultivated part of the country on the banks of the Ganges. The holders were also required to destroy wild beasts, which occasionally made inroads on the low lands. These tenures are chiefly found in *parganá Chakál*, and number 13 in all. They were resumed by the English Government, and now pay revenue, the original proprietors receiving an allowance called *mdlikáná* from Government. (3) *Jágirs* were formerly of various kinds, being granted for the most part as the reward of military service under the Mughul

Government; but these have now disappeared. Those that remain are known as Invalid *jágirs*, and were granted in lieu of cash pensions, under Regulation xliii. of 1793, to invalid native soldiers of the Company. Their number in this District is 1382. (4) *Chasaudas* do not differ much from other *samindáris*, except that they are borne separately on the revenue-roll. They are great prairies, almost totally submerged during the rains, but covered with rank grass during the hot season, and forming vast grazing grounds for cattle and buffaloes. These estates are chiefly met with in the low-lying *Pharkiyá parganá*, and are six in number.

REVENUE-FREE TENURES were originally granted by the native princes, under the Muhammadan rule, to favourites or for religious purposes. Their number, as ascertained from the Road Cess Returns, is 3745. They are held in absolute proprietary right. Very few owe their origin to Hindu foundation. Such, however, is not the case with subordinate *lákhiráj* tenures. The largest revenue-free tenure in the District is the entire Abhaipur *parganá*, held by the *khanka* or monastery at Maulanagar, which was confirmed by a *sanad* of Council, dated 9th February 1786. The proceeds of the estate are expended in feeding travellers and beggars, in keeping a school and a mosque, and also in the personal expenses of the endowed family.

SUBORDINATE TENURES, or those not held directly from Government, comprise *mukarraris*, which are generally transferable leases, granted in perpetuity at a small fixed rent, and owe their validity to immemorial custom. They are granted to the younger sons and females of Hindu families where the law of primogeniture prevails. Those held by widows, however, revert to the holder of the *samindári* on the death of the lessee. These tenures are generally small. The largest in the District is one known by the name of Bhilwáná, which pays a rent of £3, 4s. od., and collects a gross rental of £868, 4s. od. It was granted by an ancestor of the Maharájá Sir Jái Mangal Sinh to a relative. A three-fourths share has been sold by the descendant of the donee. *Dar-mukarraris* are sub-tenures created by the *mukarraridárs*, and are held by the sub-tenants on terms similar to those settled in the agreement with the superior landlord. They also owe their original creation to the custom of the country, and are now recognised by our courts of law. *Thikás* are farms, called *ijárá*s in Bengal proper, leased out for a term of years. The *thikáddár* pays a fixed rent to the *samindár*, and gets

what he can out of the land. It not unfrequently happens that the *thiká* lease takes the form of a mortgage for money advanced, and then the lease is called a *thiká sarpeshgi*. *Katkins* are sub-leases granted by *thikáddárs* to persons who get as much as they can, either directly out of the *rayats*, or by sub-letting to *dar-katkináddárs*, who again may let to *se-katkináddárs*. *Shikmí* tenures are thus described by the Collector :—‘ It was not unusual for persons holding revenue-free estates to part with small portions of land, either by sale or by gift. On the occasion of the parent estate being resumed, the revenue of the alienated portions was fixed along with that of the parent estate, and made payable through the *samindárs*. Such tenants are called *shikmí*, and are very common in every part of the District.’

CULTIVATING FARMERS with permanent rights of occupancy were first recognised by the English Government in the Rent Law, Act x. of 1859, but they always formed part of the land-tenure system of Behar. The right of undisturbed possession might be interfered with by a powerful landlord, and there was no legal means to enforce it, but the right was none the less believed to exist. It is not, however, even now-a-days, frequently taken advantage of by the poorer class of the peasantry, who are too much under the power of their landlords to assert rights against his interest. In order to prove a right of occupancy, it is necessary to prove twelve years’ uninterrupted possession; and receipts of rents, which usually form the basis of proof, are seldom forthcoming for so many years, for *samindárs* are not in the habit of granting receipts. The right of occupancy, real or pretended, is, amongst the better class of tenants, a constant source of litigation. *Gorabandí* is a holding equivalent to the *jamá mukarrari* of Bengal, and signifies that the *rayat* holds at a fixed rent, not liable to be raised. This right, which is founded on the custom of the country, was legalized by the Rent Law, where the rent could be proved not to have been enhanced since the Permanent Settlement; moreover, twenty years of such unchanged possession gave a presumption on the part of the tenant that it had not been enhanced during the longer period, which the *samindár* was bound to rebut. Such holdings are very frequently met with north of the Ganges, but are not so common in the south of the District. The term *gorabandí* is often applied by *rayats* to other tenures, under the supposition that holding at a fixed rent for twenty years gives them a right to hold at a fixed rent for ever. For instance, many

rayats on *diárá* lands, which did not exist at the date of the Permanent Settlement, call themselves *goradárs*, on the plea of their rent never having been increased. *Bháolí jot* is the designation of a holding in which the tenant pays his rent, either in money or kind, proportionally to the out-turn of his crops in each year. It is popular with the peasantry, and is of very ancient standing. If, as is generally the case, the crops are equally divided between the *samindár* and the *rayat*, the latter considers himself better off than if he paid rent according to neighbouring fixed rates; but it often happens that a grasping landlord demands nine-sixteenths of the crops, and even more. The landholder or middleman, however, rarely takes his share in kind; the value of it is fixed by a system known as *dánábandí*, and the tenant pays its value in coin, keeping the entire crop for himself. Should the tenant object to the *dánábandí*, the proprietor takes possession of his share on the threshing-floor. The Collector says: 'I calculate that nearly one-half of the cultivated area of this District is held under the *bháolí* system.' Tenants-at-will form the chief portion of the agricultural class in Monghyr. They hold their land at any rates that they and the landlord may agree to. There is a peculiar class of yearly tenants, called *hastabúdí rayats*, who cultivate *diárá* lands, which are submerged during the rains. In the month of Bhadra, a settlement is made by the landlords with them, if willing to cultivate at a rent fixed for the year, according as the *diárá* appears covered with a rich alluvial deposit or with sand. The rent naturally varies very much under this kind of tenure. These *hastabúdí* tenures prevail chiefly in *parganá* Salmábád. *Kámat* lands are those held in home cultivation by *samindárs* or large subordinate tenants. In estates where there are many sharers, if one of them holds any portion *kámat*, he pays a small contribution to the other coparceners.

RENT-FREE SUBORDINATE TENURES are small grants of land, made by proprietors in chief or other large tenure-holders, for religious or charitable purposes. The principal kinds are called *debottar*, *sivottar*, *hasrat*, *pirottar*, *dargah*, etc. *Debottar* is land granted rent free, the proceeds being appropriated to the worship and support of Hindu idols and temples other than those dedicated to Siva, the grant in that case being called *sivottar*. This is the ordinary method of providing for the support of idols, priests, and temples. As soon as the lands have been so dedicated, the rights of the donor lapse for ever; he cannot alienate them, and his heirs cannot in-

herit them. But temporary leases of them, extending to the life of the *sebdit* or *mahant* (the manager and superintendent of the establishment for the worship), may be granted by him for the benefit of the idol, or for the repairs, etc. of the temples. *Hasrat* and *pirottar* are lands given to Musalmán devotees and *fakirs*, on condition of their devoting themselves to the service of certain *masjids* or mosques, burial-grounds, and other places sacred in Muhammadan eyes. The number of such tenures in this District is about 1500. Since the extinction of the *ghátwáli* tenures, there are no *jágirs* or estates held directly from Government as the remuneration of services past or present. The landholders have, however, preserved several of the subordinate service tenures, the chief of which are the *chaukidári jágirs* held by village watchmen in lieu of cash payment for their services as rural policemen; and *goraiti jágirs* granted to *goraits*, who are *samindári* servants, and receive two or three *bighás* of land rent free instead of money wages.

RATES OF RENT.—The latest information on this subject was obtained in the beginning of 1873. Special inquiries were made by the Subdivisional officers, in consequence of a report by the officer in charge of Jamúí that 'veritable rack rents' prevailed in his jurisdiction, due to wholesale enhancements. The returns showed both the rent paid at the time of the Settlement previous to the civil suit in which the enhancement was decreed, and the rent payable by order of the court. These rates were thus returned for the *bighá* of 3025 square yards, or '625 of the English acre :—*Parganá Báda-bhúsári*—first description of land, Rs. 1. 4. 0 or 2s. 6d., enhanced to Rs. 2 or 4s.; second description of land, R. 1 or 2s., enhanced to Rs. 1. 12. 0 or 3s. 6d.; third description of land, R. 0. 4. 0 or 6d. *Parganá Pharkiyá*—first description of land, Rs. 1. 12. 0 or 3s. 6d., enhanced to Rs. 2. 3. 0 or 4s. 4½d.; second description of land, R. 0. 8. 0 or 1s., enhanced to Rs. 2. 1. 0 or 4s. 1½d.; third description of land, R. 0. 4. 0 or 6d.; and fourth description of land, R. 0. 1. 0 or 1½d. *Parganá Chándan Bhuká*—first description of land, R. 1 or 2s., enhanced to Rs. 5 or 10s.; second description of land, R. 0. 14. 0 or 1s. 9d., enhanced to Rs. 4. 12. 0 or 9s. 6d.; third description of land, R. 0. 12. 0 or 1s. 6d., enhanced to Rs. 2. 9. 0 or 5s. 1½d.; fourth description of land, R. 0. 8. 0 or 1s., enhanced to Rs. 2. 4. 0 or 4s. 6d.; and fifth description of land, R. 0. 4. 0 or 6d. *Parganá Amarthu*—first description of land, Rs. 2. 8. 0 or 5s., enhanced to Rs. 5. 8. 0

or 11s.; second description of land, Rs. 2 or 4s., enhanced to Rs. 4. 8. 0 or 9s.; third description of land, Rs. 1. 8. 0 or 3s., enhanced to Rs. 4. 4. 0 or 8s. 6d.; fourth description of land, Rs. 1. 4. 0 or 2s. 6d., enhanced to Rs. 4 or 8s.; fifth description of land, R. 1 or 2s., enhanced to Rs. 3. 8. 0 or 7s. *Parganá Abhai-pur*—first description of land, Rs. 2. 1. 0 or 4s. 1½d., enhanced to Rs. 4. 1. 0 or 8s. 1½d.; second description of land, Rs. 1. 10. 0 or 3s. 3d., enhanced to Rs. 2. 9. 0 or 5s. 1½d.; and third description of land, R. 0. 12. 0 or 1s. 6d. *Parganá Baliyá*—first description of land, Rs. 2. 8. 0 or 5s., enhanced to Rs. 3 or 6s.; second description of land, Rs. 2 or 4s., enhanced to Rs. 2. 12. 0 or 5s. 6d.; third description of land, R. 1 or 2s.; and fourth description of land, R. 0. 12. 0 or 1s. 6d. *Parganá Bhusárl*—first description of land, Rs. 3 or 6s., enhanced to Rs. 4 or 8s.; second description of land, Rs. 2. 8. 0 or 5s., enhanced to Rs. 3 or 6s.; third description of land, Rs. 2 or 4s., enhanced to Rs. 2. 8. 0 or 5s.; fourth description of land, Rs. 1. 12. 0 or 3s. 6d., enhanced to Rs. 2 or 4s.; fifth description of land, Rs. 1. 8. 0 or 3s.; and sixth description of land, R. 1 or 2s. *Parganá Naipur*—first description of land, Rs. 2. 8. 0 or 5s., enhanced to Rs. 4 or 8s.; second description of land, Rs. 2. 4. 0 or 4s. 6d., enhanced to Rs. 3 or 6s.; and third description of land, Rs. 2 or 4s. *Parganá Gidhaur*—first description of land, Rs. 2. 8. 0 or 5s., enhanced to Rs. 5 or 10s.; second description of land, Rs. 1. 4. 0 or 2s. 6d., enhanced to Rs. 3. 4. 0 or 6s. 6d.; and third description of land, R. 0. 8. 0 or 1s. *Parganá Kajrá*—first description of land, Rs. 4 or 8s., enhanced to Rs. 4. 6. 0 or 8s. 9d.; second description of land, Rs. 3 or 6s., enhanced to Rs. 4. 4. 0 or 8s. 6d.; third description of land, Rs. 2. 8. 0 or 5s., enhanced to Rs. 4. 2. 0 or 8s. 3d.; and fourth description of land, Rs. 2 or 4s., enhanced to Rs. 4 or 8s.

ABWABS OR CUSTOMARY CESSES.—So far as our knowledge of systems of land-holding in this country extends, it is found that, from the earliest period of which we have reliable information down to the present day, all tenants, including often the very largest, have paid various dues or fees to the Government or the proprietor in chief, known as *abwabs*, in addition to the actual rent chargeable on their estates. Besides these, the *samíndár* levied cesses under the same name from certain castes and classes, usually artisans or followers of special professions, for permission to ply their callings on his property. In 1790, Mr. S. Davis, the Assistant-Collector of

Bhāgalpur, was deputed to Monghyr to inquire into the land tenure system and rates of rent which prevailed in *pargands* Haveli, Monghyr, and Salimābād, preparatory to the new Settlement then contemplated. In a report dated 11th August, after describing the amounts and modes of regular assessment, he gives the following account of the *abwabs* then levied, from which it appears that these customary charges were looked on as enhancements of rent, and were so in fact, as distinguished from arbitrary and uncertain cesses:—‘The division of the assessment into *asl*, *abwāb*, and *nekdārī* is a mode which has prevailed from time immemorial in this *pargand*, as in other parts of Behar, whereby the rent or produce of the land became appropriated in distinct shares to Government, to its officers, and to the cultivator. The two first shares are considered as the right of Government, and the last, or *nekdārī*, of the several persons particularized, whose contingent expenses of collection, together with some further charges, which will be mentioned, were defrayed by the *dihī kharcha*. It may be necessary further to explain the several articles of taxation contained under each separate head.

‘*Asl* is the general rate per *bighā* on land, the rent of which is paid in coin; it varies according to the quality of the soil and the facility of procuring an artificial supply of water from tanks or wells in the dry season. These rates have existed beyond the date of any public record, and were certainly fixed long before the Company acquired the *dihādārī*.

‘*Abwābs*.—(1) *Kusur* is a term meaning *bāttā*; it was formerly levied as a part of the *dihī kharcha* (explained farther on), to make up for any deficiency in the rupees collected in the *mufassal*, which, under the Mughul Government, were required to be paid into the treasury at a fixed standard. Kāsim All converted this contingent tax into a uniform and permanent assessment throughout the *pargand*, as it has continued ever since. There is no objection now made to it by the *rayats*, whose advantages, in the increased price of grain and other articles since its first imposition, may be supposed to have kept pace with the tax. It was calculated upon the estimated value of the *mālgusdārī* share, at ten *gandas* per rupee. (2) *Dihidārī*: this was originally the appropriated share of the *dihidār*, an inferior officer of the police, whose office, about sixteen years ago, being found unfilled, and his services unnecessary, the assessment was, under the same name, shifted from the *nekdārī* to the *abwāb*, where it now constitutes a part of the revenue. It was paid in kind

upon both the *mālgusārī* and Government shares, at six *chhatāks* per *man*. (3) *Mihmānī*: this is a partial exaction, which, during the residence of Kāsim Alī at Monghyr, was first laid upon Mohabī and its dependent villages, Sakarpur and Jumalkita, at the gross amount of Rs. 42 on the first, Rs. 20 on the second, and Rs. 12. 12. 0 on the last. The assessment was apportioned on such land only as was capable of being watered in the dry season; by which mode its operation became partial even among the *rayats* of the same village, whose *asī* rates of land became thereby increased seven *ānnds* in the rupee. At the earnest entreaty of the *rayats*, and on their ready consent to my proposal of their taking waste land on an adjacent island—there being none on the mainland—to such an amount as in its rent might be equivalent to the obnoxious exaction, I recommended the abolition of it to the *samindār*, who readily acquiesced; and it is abolished accordingly.

‘*Nekdārī*.—(1) *Mukaddamī*, or, as it is also termed, *mālikānā*, is the proportion of the gross rent from time immemorial allotted to the proprietor or officer called *mukaddam*. (2) *Rasūm chaudharān* is an allotment to the *chaudharī* or *samindār*, similar in its nature to the foregoing. (3) *Patwārī* is an allotment to the *patwārī* or village registrar. (4) *Gordāī* is an allotment to an inferior village officer acting under the *samindār* or *tahsildār*, whose office is somewhat similar to that of a peon. (5) *Dīhī kharcha*; this was formerly here, as it is still in other parts of the District, an assessment variable in its rate, which could be determined only at the end of the year, agreeably to the amount of certain contingent expenses which were supposed to be incurred during the year for the purposes implied in the literal meaning of the term, joined to the *tahsilānā* of the *samindārs* and of the *kānungos*, and other established allowances. The unfair mode, however, of computing this assessment was complained of about sixteen years ago, and an inquiry was then made into its actual amount in each village. In lieu of this variable assessment, a proportional rate was established as a permanent tax, which has duly been collected ever since. By the operation of this measure, which seems to have given general satisfaction, I found one principal object of my deputation anticipated in this *parganā*; the only indefinite assessment being thereby reduced to a fixed rate, and the oppressive exaction of peons in particular precluded. I must also do the *samindārs* the justice to observe that, on the most minute inquiry, I do not find them to have deviated from the rule

in question. The above explanations apply equally to the *bhdoli* and the *radli* rates of taxation; but in the former there is an additional article to be noticed, namely *kadyali*. This was formerly, it may be presumed, an allowance made to the *kadyal*, who actually weighed out the respective shares of the crop; but in process of time, instead of the produce in kind, the value of that produce, at a certain rate in money, was paid by the *rayat*, and the *kadyal* became unnecessary, although the assessment was still continued under the same name as a part of the revenue. It was calculated upon the estimated value of the *malgusari* share, and paid at the rate of ten *gandas* per rupee.

The cesses still existing in this District, and levied, are numerous. The following description of the principal ones is derived from a report on the subject by the Collector, Mr. Barlow, in 1872:—*Bhasaudha* or *morsaudha* is a tax levied in the *parganas* and estates situated in the Jamul Subdivision, from the Goálá or cowherd caste, and is proportionate to the number of head of cattle owned by each family. The rate varies, but is not less than 8 *annís* or 1s. a year in any case. In the headquarters and Begu Sarái Subdivisions, the cess imposed on this caste takes the form of house tax, called *karunchá*, at the rate of 4 to 8 *annás*, or 6d. to 1s., for each house. It does not appear that the *samindár* makes any return for the money thus received, beyond a kind of indefinite protection. *Basuri* is a yearly tax, exacted in every part of the District, from the labouring and manufacturing castes, seemingly for the permission of the landholder to pursue their trades on his estate. The idea of permission, however, does not seem to enter into the minds of the labourers or artisans, who pay the amount as the *hakk* or right of the *samindár* on whose property they live. The term *basuri* means rent for house land; but as a matter of fact, the amount of this cess is independent of the amount of land, and indeed it is levied from those who do not usually possess any land at all. Certain castes, such as the Dhánuks and Kahárs, redeem the *samindár's* claim by the performance of personal service. The *bhauri* is a tax collected in the Jamul Subdivision from non-residents, pedlars, costers, etc., who come to a village for the sale of their wares. It is much of the same nature as the preceding cess, and is sometimes levied in its place and sometimes together with it. The Collector says 'it has the complexion of a ground rent.' The *kadyali* is a charge on all sales effected within the estate of the landholder. The word literally

means weighman's fees. The post of *káyál* is disposed of by the *samindár* by a kind of private auction to the highest bidder, who levies certain dues from the frequenters of the particular *básár* or market for which he holds the contract. The better class of landlords fix the rates at which these dues are leviable, but often the *káyál* is permitted to make the most that he can extract from sellers and buyers. In the latter case, bad feeling and violence are occasionally the result. The Collector explains that '*káyál* is a general custom, and not restricted to the dealings of *rayats*. A man is appointed as a salesman by the *samindár*, and gets his dues at so much in the *man* on every sale; the seller pays, but by custom deducts the allowance from the purchaser.' A tax on the musical castes, for liberty to beat their drums at processions, marriages, and feasts, is levied in the Jamuí Subdivision, and called *bájantri*. *Kalkar* is a tax on oil manufacturers or Telis, which is levied throughout the whole District; persons who pay *basurí* are, however, exempted. *Dolid* is a somewhat similar cess, peculiar to the Jamuí Subdivision, on oil manufacturers and traders or Baniyás. *Chalki* is a species of ground rent, collected in the headquarters and Begu Sarái Subdivisions. In the south-western *parganá*s it is called *doba*. In return for this cess, the payer has a right to a plot of ground in the market on which to display and sell his goods, and is sometimes exempted from payment of *káyál*. His right is not restricted to market days; and he may erect a shed or thatch raised on bamboo posts, but not a permanent shop. *Phur* is a tax levied on the weaver castes, Dhuniás, Tántis, Tatwás, and Jogis, and is collected principally in the Jamuí Subdivision. *Tunká* takes the place of *phur* in the headquarters and Begu Sarái Subdivisions. In Jamuí it is occasionally levied in addition to that tax. It is not levied from those who pay *basurí*. *Pasbán* is the name of the charge raised for the support of the rural police in Subdivision Jamuí. When paid to the *samindár*, it is usually an unjust cess, as it rarely passes through his hands to the *pasbán*, but is a second time levied by that official from the villagers. The Collector remarks: 'The signification of this cess in other parts of the District is different. The *pasbán* or *goráit* is a village watchman. He is supposed to guard property brought into the village, and gets a small commission on sales directly, and not paid through the *samindár*. The *chaukidár* and *pasbán* are usually the same man.' In some cases the *pasbán* does not perform any of the duties of police,

but is merely a subordinate servant on the rent-collecting and managing establishment of the *samindár*. The actual *chaukidári* charge is levied all over the District, and amounts to Rs. 3 to Rs. 4 or 6s. to 8s. a month, divided amongst the villagers of the ward within which the watchman's beat extends. It appears from the police returns that the average number of houses in the care of each rural policeman is 75, so that this cess is equal to a house tax of 1d. to 1½d. a month. It is usually collected by the *chaukidár* himself, who is assisted in this if necessary by the regular police. The Collector states: 'In almost all cases the *chaukidárs* collect some produce called *panjá* direct from the *rayats* during harvest. In addition to this, in all cases where the *samindár* professes to pay the *chaukidár's* wages, are in some instances, I suspect, where he does not even profess to do so, the *rayats* have to pay the *samindár* likewise.' *Bandohár* is a cess levied in Jamúf Subdivision for keeping pounds in order. *Nagarjábá* is a tax for charitable and religious purposes. *Chándá*, a former contribution for presents to *fakírs* or beggars, is levied in *parganá*s Gidhaur, Chakál, and Súrajgarha, and occasionally elsewhere. *Sondár* is, according to the District Superintendent of Police, another name for *káyál*, given because men of the goldsmith caste (*sonár*) for the most part hold the office of weighman. It is a deduction from the purchaser of a half-pound weight in every rupee's worth of grain or other articles weighed, and forms a kind of reimbursement of the tax paid by the *káyál* to the *samindár* for permission to act as weighman. *Grámtah* is levied in Jamúf Subdivision and elsewhere for performance of religious ceremonies. It is explained that this name is derived from the two words *grám*, meaning a village, and *ta* or *tha* worship, so that it is a translation of *nagarjábá*, the name applied in other parts of the District to the same charge. *Ekamí* and *kahurí* are taxes levied in the Jamúf Subdivision, to pay the salaries of the clerks in the *samindár's* managing office. *Neg patwári* and *phárkáná* are levied generally throughout the District, and constitute the wages of the village *patwári*. On this the Collector remarks: 'As far as I can learn, the *patwári* dues are collected by the *patwári* himself, without aid from the *samindár*, beyond, of course, the aid of his influence.' In the case of *bháoli* tenures, after the grain is shared with the *samindár*, a small quantity is left at the bottom of the *dol* or great basket in which it is ordinarily kept, which the *gumáshtá*, *patwári*, and *baráhil* claim as their share or *hakk*, and divide amongst themselves. If

the rent is paid in money, the *rayat* gives 6 *pies* in the rupee, or in some parts 3 *pies*, on his entire rent, to be shared amongst these village officials. *Hájatáná* is levied in Jamúí and a few other places from tenants at the time they pay their rent, and is a fee exacted by the *patwári* before a receipt is granted. *Náchá*, the Collector states, is the name given in the Jamúí Subdivision to those portions of the crops appropriated by *goráits* from the *rayats* whose crops have been distrained for rent. The *goráits*, as servants of the landholder, remain in charge and levy their dues from the tenant. I have given another explanation of this cess under the head of Village Officials (p. 80). *Talabáná* is also levied in Jamúí to pay the salaries of *piádds* or landholders' messengers. *Sídhá*, in the headquarters and Jamúí Subdivisions, is the same as *tulabáná*, but is not so generally exacted. If messengers are sent by the *zamindár* to bring the *rayats* together, or for any other purpose, they are entitled only to their diet expense. *Sídhá* is also used to express the presents of uncooked food and sweetmeats made to the rent-collectors of the landlord when they visit a village. *Kharchá amin*, in the Jamúí Subdivision and elsewhere, is a portion of the crop appropriated by the landlord's men, who have been sent out to measure the land, and to make the *dánábandí* or estimate of the crop where rent is paid in kind. The Collector states that 'the deduction on this account is said to be made equally from the *zamindár's* and *rayat's* share of the crop.' *Moháfizát* is a cess levied in the Jamúí Subdivision as payment of the *barkandás* employed in guarding the offices of the landlord, which are scattered all over his estate. *Báttá* is a premium, usually amounting to one *ánná* on every rupee, or three farthings on every shilling, made in the tenant's rent in addition to his nominal rent, and paid at the same time; *Kampani báttá* or Company's discount is the name given to this charge. *Salámi* is a general fee paid by every *rayat* to his landlord, principally on the two special occasions when he is accepted as a tenant, and when his name is first entered on the rent-roll of the estate; *rasmí* is the name of this cess in the Jamúí Subdivision. *Babat beshí* is a kind of excess rental levied in the Jamúí Subdivision, in place of a regular increase of the rent, based on the amount of land held. It is paid by the *rayats* to avoid questions about the title and measurement of their holdings. The *dahyak* is levied generally wherever the *bhdoll* system of tenure is in force. It is the name given to the part of the *zamindár's* share in excess of one-half,

in case the crop is not equally divided between him and his tenant. *Māngan* is much the same as *dahyak*, but is levied only in the Jamúí Subdivision. It represents the quantity of grain which the *rayat* is expected to give out of his share as a kind of *nazar* or gift to the *zamíndár*, after the *bháolt* division has been completed and the dues of the *tahsildár* and *goráit* have been discharged. Another account states that it is only another name for the *patwári's* fee, paid not in cash but in kind. *Mukaddam* is the name of a cess collected in some villages in the headquarters and Begu Sarái Subdivisions by the head-men called *mukaddams*, who are also often rent-collectors. *Gilándázi*, from *gil*, earth, and *andazi*, throwing, is the name of a fund raised by *zamíndárs* for the construction and repair of embankments in places liable to inundation.

NATURAL CALAMITIES in Monghyr District are mostly due to drought, and in a less degree to floods. Other causes of loss to the cultivator occasionally occur. The insect called by the natives *gadhya* sometimes seriously injures the autumn and cold-weather crops; and locusts were seen in the District in 1855, 1861, and 1865. Some kinds of blight have also been known, but have not led in any case to extensive loss. In 1871 the Collector said: 'I am not prepared to supply a scheme for embankments. I have already spoken of droughts; they arise principally from local absence of rain. The calamity being, however, generally widespread, there is also a failure of the river supply of water, which otherwise would do much to mitigate the evil. There is no special demand for canals, as in most Districts; but if the cultivators saw their own advantage, no doubt irrigation works would pay. But there is no field for an immediate and apparent return in the way of bringing large tracts of waste land under cultivation.' The principle of compensating influences does not play much part in this District. The land is of an average kind as regards position, neither lying very high nor low to any large extent. Thus there is little high land that would be only cultivated in years of excessive flood, and little land so low-lying as not to be cultivated except in seasons of exceptional dryness.

Since the erection of Monghyr into a separate District, the only droughts of such severity as to deserve special notice have occurred of late years, that is, in 1865 and 1873, resulting in the scarcities of 1866 and 1874.

FAMINE OF 1866.—The following description is principally derived

from Mr. F. R. Cockerell's report on the distress in the Behar Divisions. In Monghyr, it was most felt in the south-west and western portion of the District, viz. *parganás* Chakál, Gidhaur, Bisthazárl, Amarthu, and Maldah, embracing an area of about 1300 square miles, where rice is the chief staple of cultivation. The crop of 1864 failed to a considerable extent, and, with the certainty of a repeated failure in 1865, the market rate of the commonest sort of rice rose in October of the latter year to 11 *seers* for the rupee, or 10s. 2d. per hundred-weight. Other food-grains became proportionately dear, and the inhabitants of the distressed localities began to flock into the town of Monghyr. On the 8th November the Collector convened a public meeting, at which donations to the amount of £115 were obtained, and further contributions of £45 per month guaranteed, for the relief of the poor. About £33, 4s. od. was expended in the gratuitous distribution of food, which lasted till the middle of December. There was then some relaxation of the previously existing pressure, in consequence of the gathering of the rice crop, and the continuation of public relief was deemed unnecessary. After the storing of the rice crop, agricultural labour was again at a discount, and the distress occasioned by the prevailing high prices of food began to be felt in a more severe degree; and in April large crowds of paupers frequented the town. The Municipal Committee, at a meeting held on 2d May, resolved to undertake certain works with the funds at their disposal, for the express purpose of assisting the destitute. As the object was merely to give employment to those who were able to work, but could find no market for their labour elsewhere, the rate of payment was fixed somewhat below the ordinary rates. No labour was attracted on these terms, and it was consequently assumed that the indigence of the labouring classes was not so great as had been supposed.

No further relief measures were attempted till the following July, when, in consequence of the accounts received regarding the distress prevailing, more especially in those portions of the District before mentioned, a second public meeting was convened by the Commissioner on the 23d of that month. A Central Relief Committee and two Sub-Committees were formed and a general subscription was set on foot, by which £864, 8s. 8½d. was raised for expenditure in the gratuitous distribution of food. Relief centres were established on the south of the Ganges at Monghyr, Jamúf, Patanda, Sekandrá, Shaikhpurá, and Chakál, in July and August; and on the north of

the Ganges, where distress appeared later, at Begu Saráí and Tegrá, in the end of August and September. At Monghyr, Jamúí, and Shaikhpurá, cooked rice and pulse mixed were given once daily, in proportions ranging from 1 lb. to 12 oz. for each adult, and from 8 oz. to 6 oz. for each child. At the other centres the grain was distributed uncooked, but in similar proportions. In some cases, half the allowance of food was given, supplemented by a payment of $\frac{1}{2}$ d. to each adult. Labourers on relief works were paid at rates varying from $2\frac{1}{2}$ d. to $1\frac{1}{2}$ d. for the day's work. Nursing mothers and very young children received food twice daily. Much difficulty and delay were experienced in conveying the grain to Jamúí and Chakáí, owing to the want of roads and the number of rivers which had to be crossed at the most unfavourable season. During September, the worst month of the distress, the daily average number receiving food gratuitously at each centre was,—at Monghyr, 999; Jamúí, 414; Pátsandá, 169; Sekandrá, 147; Shaikhpurá, 307; Chakáí, 56; Tegrá, 49; Begu Saráí, 60. In October the number at Tegrá rose to 206. The daily average number employed on public works was at Monghyr, in August 629, in September 543; at Shaikhpurá, in October 150; and at Begu Saráí, in September 35. An assignment of £500 was also made by Government for the construction of a new road between Jamúí and Chakáí, which gave employment in October to 767 persons, at the same time that 180 were employed by the Monghyr Municipality on similar work. The highest total daily average number of persons obtaining public relief throughout the District at any period of the famine was 3450.

It was expected that the construction of the new chord line of the East India Railway, traversing the very tracts in which the distress was most severe, would have given employment at the time when it was most needed, but the rates offered by the contractors were not sufficiently high to attract labourers, in the face of the ruling prices of food.

Another calamity was added to those already borne by the people, by an outbreak of cholera over the whole south-west of the District. Deaths from this disease were very numerous, especially in Shaikhpurá and Sekandrá, amounting in the latter town to 24 in one day. In these cases there can be no doubt that the disease originated in the crowding together of large numbers of people, reduced by want of food to the lowest condition of bodily strength compatible with the retention of life. The number of deaths due to

disease, assisted or engendered by want, was returned by the police month by month as follows:—1866—January, 22; February, 13; March, 18; April, 36; May, 37; June, 43; July, 45; August, 100; September, 56; October, 68; November, 103; December, 64: total, 605. At the same time, deaths from actual starvation were given as 9 in February, 2 in March, 5 in April, 11 in May, 17 in June, 35 in July, 160 in August, 136 in September, 158 in October, 90 in November, and 19 in December; total, 642.

The following prices for food-grains prevailed during the course of the famine:—1865, September—rice, from 15 to 12 *sers* for the rupee, or from 7s. 5½d. to 9s. 4d. per hundredweight; pulses, 12½ to 8 *sers* for the rupee, or 8s. 11½d. to 14s. per hundredweight; Indian corn, 20 *sers* for the rupee, or 5s. 7½d. per hundredweight. December—rice, from 13 to 9½ *sers* for the rupee, or 8s. 7¾d. to 11s. 9½d. per hundredweight; pulses, 13 to 8 *sers* for the rupee, or 8s. 7¾d. to 14s. per hundredweight; Indian corn, 17 to 13¾ *sers* for the rupee, or 6s. 7d. to 8s. 1¾d. per hundredweight. 1866, March—rice, 10½ to 8 *sers* for the rupee, or 10s. 8d. to 14s. per hundredweight; pulses, 15 to 8½ *sers* for the rupee, or 7s. 5½d. to 13s. 2½d. per hundredweight; Indian corn, 17 to 13 *sers* for the rupee, or 6s. 7d. to 8s. 7¾d. per hundredweight. May—rice, 9 to 8 *sers* for the rupee, or 12s. 5½d. to 14s. per hundredweight; pulses, 12 to 9 *sers* for the rupee, or 9s. 4d. to 12s. 5½d. per hundredweight; Indian corn, 15 to 13 *sers* for the rupee, or 7s. 5½d. to 8s. 7¾d. per hundredweight. July—rice, 7½ to 7 *sers* for the rupee, or 14s. 11¼d. to 16s. per hundredweight; pulses, 10 to 8½ *sers* for the rupee, or 11s. 2¼d. to 13s. 2½d. per hundredweight; Indian corn, 14 to 10 *sers* for the rupee, or 8s. to 11s. 2¼d. per hundredweight. September—rice, 7½ to 7 *sers* for the rupee, or 14s. 11¼d. to 16s. per hundredweight; pulses, 10 to 9 *sers* for the rupee, or 11s. 2¼d. to 12s. 5½d. per hundredweight; Indian corn, 30 to 20 *sers* for the rupee, or 3s. 8¼d. to 5s. 7½d. per hundredweight. November—rice, 9 to 8½ *sers* for the rupee, or 12s. 5½d. to 13s. 2½d. per hundredweight; pulses, 11 to 9 *sers* for the rupee, or 10s. 2d. to 12s. 5½d. per hundredweight; Indian corn, 35 to 20 *sers* for the rupee, or 3s. 2¾d. to 5s. 7½d. per hundredweight.

THE SCARCITY OF 1874 was also due to an unfavourable rainfall in the previous year. The rains commenced towards the end of June 1873, and continued during July and August, being in both the latter months more plentiful than in ordinary years. With the

beginning of September a change ensued, and the normal rainfall of 8'31 inches fell to 3'61; whilst in October, which has usually 4'56 inches, there was not a single shower. Injurious as this deficiency must have been to the later crops, such as the *aghañt* rice, it was much less so in the later months of the rains than in 1865. The District reports represent the crops towards the end of the year to have been very inferior to those of an ordinary season. The rain had ceased at a very critical time; and even where the plant did not wither, it failed to form the grain-bearing ear. In fact, the late rice harvest was not more than half an average crop in the whole District, and even less than this in parts. The result, however, of the very good rain of July and August 1873 was, that the *bhadaí* rice, *mahud*, and Indian corn were fairly good, although in some places they had suffered from inundations. The alarm was given very early in the year, and relief measures were commenced in November. The distress did not show itself soon, and the numerous railway stations on the loop and chord lines put the whole of the south of the District in a position of comparative safety, if at any time serious scarcity should appear. The condition of the north of the District, as it principally depends on cold-weather crops, could not be known till the beginning of 1874, when these are harvested. The only part of the north in which distress seemed imminent before that period was the tract round Bakhtiyárpur in the north-east corner of the District, touching Tírhut and the Súpúl Subdivision of Bhágalpur, in which rice is largely produced, and had failed.

The following minute was recorded by Sir Richard Temple concerning Monghyr District on the 28th March 1874, when all the crops of the year had been reaped, and the position of affairs could be estimated with considerable accuracy:—'The District is divided by the Ganges into two parts, northern and southern. On both banks of the river, especially the northern, there are spring crops which have turned out excellently well, and thus a large portion of the District is placed beyond the reach of apprehension. But in the northern part of the District there is a tract named Bakhtiyárpur, included in the *thánd* of Gogrí, which is separated from the basin of the Ganges by a belt of swamp, and in which the main staple of rice has failed, having only produced a one-sixteenth to one-eighth yield. In the southern part is also a broad tract, comprising the *thánds* of Shaikhpurá and Sekandrá, dependent

mainly on the rice crop, which for the most part failed, having a yield of only three-sixteenths. There is also a hilly tract around a branch of the Vindhias, jutting out against the Ganges, within which the rice crop has failed, especially near Kharakpur, which belongs to the Darbhanga Ráj. Throughout the District there are autumn crops, Indian corn and the like, which last proved indifferent, with a yield of only six-sixteenths. The general situation may be summarized thus. Several tracts of the District have lost the greater part of their food-supply for nearly a year; but in juxtaposition with these there are tracts with excellent crops. There are as good facilities for trade and communication as could reasonably be expected in any District. At present the poorer classes in the distressed tracts are engaged in cutting the harvest in the flourishing portions of the District; and when this employment ceases, that is, in a few days more, they will probably come in great numbers suddenly on the hands of Government for relief. Thus the period of distress will be probably at its worst from the 15th April till the 15th June, when, if the rains fall favourably, employment will be again obtainable. But the distress, though mitigated, will last till the produce of the autumn crop comes in by the beginning of September, after which time it will cease.

'I requested the Collector to estimate the number of persons whom he expects will need assistance from Government. He takes 40 per cent. on the population of the Bakhtiyárpur portion of the Gogri *tháná*, on the population of the Shaikhpurá and Sekandrá *thánás*, and on the population round Kharakpur; which calculation gives this result:—Gogri, 42,000; Sekandrá, 44,000; Shaikhpurá, 79,000; Kharakpur, 7000: total, 172,000 persons. I would accept this part of the estimate. It is further agreed that we must provide for the whole number for two months, from 15th April to 15th June. The Collector thinks that from 15th June to 1st October we should provide for a quarter of the number. The Commissioner thinks that it would not be safe to take less than a half. The result of the two calculations may be seen thus:—Estimate by Commissioner—172,000 for two months at $\frac{3}{4}$ *ser* ($1\frac{1}{2}$ lbs.) per day, 193,500 *mans*; 86,000 for three and a half months at $\frac{3}{4}$ *ser* ($1\frac{1}{2}$ lbs.) per day, 167,312 *mans*: total, 362,812 *mans*. Estimate by Collector—172,000 for two months at $\frac{3}{4}$ *ser* ($1\frac{1}{2}$ lbs.) per day, 193,500 *mans*; 43,000 for three and a half months at $\frac{3}{4}$ *ser* ($1\frac{1}{2}$ lbs.) per day, 84,656 *mans*: total, 278,156. I concur in the Commissioner's

estimate, and consider that 360,000 *mans*, plus five per cent. or 18,000 *mans* for wastage, making 378,000 *mans* in all, should be provided for Monghyr District. Already 300,000 *mans* have been ordered by the local Government, of which 192,000 *mans* have been stored. Besides this, there are 20,000 *mans* stored by the Darbhanga Court of Wards at Kharakpur, which, added to the 192,000, makes up 212,000 *mans*, leaving 166,000 *mans* yet to be sent. But as the grain already sent consists of rice, the remainder can conveniently be supplied, if the Government sees fit, by mixed grain obtained in the North-Western Provinces.

‘I have the pleasure to state that the Commissioner and the Collector speak in high terms of the conduct of the *zamindárs* in the distressed tracts, who are maintaining their tenantry from their own resources, taking advances from Government for this purpose, and constructing tanks and such-like works in the villages. The number of such tanks is reported to be at least thirty-four. The Darbhanga Court of Wards, also, through Mr. Roberts, the local manager, is setting the best example to neighbouring *zamindárs*, by storing grain, constructing works, and assisting *rayats*. The amount of cash advances obtained from Government is,—Advances for purchase of grain, Rs. 56,800; for land improvement, Rs. 33,790; and generally for helping *rayats*, Rs. 11,300: total, Rs. 101,890. The length of relief roads amounts to 254 miles. The number of relief labourers, including those employed by *zamindárs* on their tanks and those employed by the Court of Wards, may be stated for the present at 12,000. This is less than the numbers for some of the previous periods; but, as already explained, the people have gone off to the harvesting.’

On the 24th April it was reported that, except in the neighbourhood of Bakhtiyárpur, the condition of the District was on the whole satisfactory. The cold-weather crops had been succeeded by a good *mahúd* crop; supplies were ample, and there had been no great export of *rabí* grain, whilst the number of persons on relief works had fallen to 5364. At the end of May the condition of affairs was generally favourable, and in most cases improved; but the circle officer of Bakhtiyárpur stated that ‘there can be no doubt that but for the timely assistance of Government, many thousands of persons would have died of starvation in this circle.’ At this period 261,535 *mans* of Government grain had been stored, of which 22,639 *mans* had been expended, consisting of 830 *mans*

advanced to cultivators, 17,544 *mans* sold to labourers and the public, and 4234 *mans* gratuitously distributed. On the 8th August, none of the subdivisional or circle officers reported any distress; and a large incoming *bhadai* harvest was spoken of, except on the low lands near Lakhisarai, where this crop was destroyed by floods in the Keul. The circle officer of that tract remarked: 'The cultivators here sow on chance every year, and do not get a crop once in five years. This year their hopes were perhaps raised by the advanced stage to which the crop reached, while the result was the more unfortunate, owing to the short crop of last year.' At this period 202,630 *mans* of grain had been consumed, of which 132,949 *mans* were advances to *rayats* and *samindars*, 47,072 *mans* sold to the public or to labourers, 14,126 *mans* gratuitously distributed, and 15,376 *mans* expended in payment in kind to labourers.

On the 3d October all relief had ceased. In a report of that date, the Collector gives the expenditure of rice as 227,502 *mans* or 8125 tons, of which 150,090 *mans* were advances to *rayats* and *samindars*, 16,148 *mans* sold to labourers, 50,971 *mans* sold to the public, and 8856 *mans* given in charitable relief. The total amount stored was 238,529 *mans*. The difference between this and the grain expended, 11,017 *mans*, was disposed of subsequently by sale. In another return of the same date, the financial results of the scarcity are stated as follows:—Placed to credit of Public Works Department, £16,817; for transport of grain, £69,188; disbursed to officers in charge of transport, £3708; construction of storehouses, £516; payment of storehouse establishments, £3928; miscellaneous charges, £1595; advances for purchase of grain, £7625; advances to municipalities, £500; advances for land improvement, £4449; advances to cultivators, £5762: total, £113,088. These figures, although they had not then been fully audited, are approximately correct, and may be taken as the cost of the famine relief, exclusive of the price of Government grain and its transport outside the District. These latter items may be roughly put down at Rs. 5 or 10s. a *man*, giving a cost of £119,259, which, with the expenditure before mentioned, makes a total expenditure for famine relief of all kinds of £233,347; of this, the advances, amounting to £18,336 and £52,532, the value of the 150,090 *mans* of grain advanced to *rayats* and *samindars* respectively, at an average of Rs. 3. 8 or 7s. a *man*, in all £70,868, will be in large part recovered.

FAMINE WARNINGS. The maximum price of unhusked and

husked rice during the famine of 1865-66 seems to have been 13 and 8 *seers* per rupee, or 8s. 7½d. and 14s. per hundredweight. The rates have recovered from the effects of the then scarcity; but as the general tendency of prices has been and still is upwards, it is improbable that those which existed before that calamity will ever again obtain. The Collector reported in 1871, before the experience of 1874, that 'when rice reached the price of from ten to twelve *seers* per rupee, or 11s. 2½d. to 9s. 4d. per hundredweight, famine rates may be held to have been reached. I can give no other reason for determining this particular rate but that it seems a reasonable one in the opinion of others besides myself. If, also, as is certainly the case, the poor live from hand to mouth, an increase of almost double in the price of their food must be sufficient to reduce them to extremity. The partial failure of the rice crop would be a sufficient warning of famine; so also the sale of rice in January and February at sixteen *seers* for the rupee, or 7s. per hundredweight. The District depends on the rice crop chiefly, and I do not consider that other crops can compensate for its failure. Considering that we have two lines of rail, and also river communication, I think we are sufficiently secure from isolation. The only remedial measure I suggest, in case of famine, is the prompt importation and storing of grain.'

FOREIGN AND ABSENTEE LANDLORDS.—In 1871 the Collector reported that sixteen European residents were registered proprietors of landed property in Monghyr, paying £3234, 14s. od. Government revenue; and that there were 5155 Musalmán proprietors, paying £23,509, 17s. 7½d. Less than one-fourth of the District was owned by absentee landlords.

THE ROADS of Monghyr District for the most part pass through or radiate from the headquarters station. The principal of these are not metalled. The following are the old roads of the District, as specially returned to me in 1871 by the Collector, together with their length, annual cost of repair, and the names of the chief markets situated on them :—(1) The Bhágálpur Road, extending fourteen miles from the town of Monghyr to the boundary of Ghorághát; total annual cost of repair, £50, or £3, 11s. 5½d. a mile; markets at Mahádeva, Bariárpur, and Ghorághát. This road has lately been metalled as far as Bariárpur. (2) The Patná Road, extending thirty-five miles from Monghyr to Barhiyá, partly under construction in 1870; with markets at Báháchauki, Mednichauki, Súrajgarha, Bálguzár, and Barhiyá. It runs about four miles north of the rail-

way, skirting the river, and carries a large local trade. (3) The Tirhut Road, from the bank of the Ganges opposite Monghyr, westwards and north-west for forty-six miles to the frontier at Rasádpur, partly under construction in 1870; with large markets at Baliyá, Bishnupur, Begu Sarái, Tegrá, and Ránígodná. Large portions of this road are liable to be flooded in the rains. (4) The Kharakpur Road, joining Kharakpur with the Bariárpur railway station, metalled, eleven miles in length; annual cost, according to a return of the executive engineer, £700, or £63, 12s. 8½d. a mile. (5) The Súrajgarha Road, joining the river-side market of Súrajgarha with the Kajrá railway station, eight miles in length, metalled; annual cost of repair, £100, or £12, 10s. od. a mile. (6) The Lakhampur Road, from the Sultárganj railway station, six miles in length in Monghyr District, metalled; costing annually £500, or £83, 6s. 8d. a mile. (7) The Jamúi Road, joining the Subdivisional town with the Lakhísarai railway station, twenty-three miles in length, partly under construction in 1871; with markets at Gausganj, Dhand, and Jamúi. (8) The Gairak Road, from Lakhísarai to Panhesa, twenty miles long, and passing through the large commercial town of Shaikhpurá. (9) The Sekandrá Road, joining the town from which it is named with Shaikhpurá, seventeen and a half miles long. There are no markets on it, but it passes through a rich rice-producing country. (10) The Jamálpur Road, from Monghyr, six miles long, and costing £70 a year in repairs, metalled. In 1871, the fourth, fifth, and sixth of these roads were under the supervision of the executive engineer of the Bhágálpur Division, and of a supervisor at Monghyr. Since the date of the Collector's report giving the above information, the Road Cess Act of 1871 has been introduced, and the famine with its extensive relief works has taken place. A road (11) from Jamúi through Gidhaur and Chakái to the frontier of the Santál Parganá, about forty miles long, is maintained by funds placed at the disposal of the Branch Committee at Jamúi, and raised under the operation of the Road Cess Act. Another road (12) is similarly provided for from the Begu Sarái allotment, from the Tirhut boundary near the large Ruserá market, along the left bank of the Burá Gandak for about fifty-six miles to Gogri, near its mouth, whence it turns eastward for fourteen miles to the Bhágálpur frontier at Bhatkár. The principal roads made during the famine form a system traversing the rice country in which the rice failure was most severe. They are (13) from Lakhísarai to

Sekandrā, sixteen miles ; (14) from Sekandrā to the Jamúí Headquarters Subdivisional town, twelve miles ; (15) from Jamúí town to the Jamúí railway station, four miles ; and (16) from the Jamúí railway station to Ganjtā, at the foot of the Kharakpur hills, twelve miles. On the north of the Ganges, a short road (17), eight miles long, from Bakhtiyárpur to the Tirhut boundary, was also made in 1874.

RAILWAYS.—Both the chord and loop lines of the East India Railway traverse Monghyr District. The length of the former within the District is fifty-six miles, and of the latter, including the Monghyr branch from Jamálpur, forty-five miles,—in all, one hundred and one miles. The following are the stations and the distances between them :—On the chord line—(1) Simultalá to (2) Nawádí, eleven miles ; to (3) Gidhaur, seven miles ; to (4) Jamúí, nine miles ; to (5) Manánpur, ten miles ; to (6) Lakhísaral, eight miles ; to (7) Barhiyá, nine miles. On the loop line—(8) Bariárpur to (9) Jamálpur, six miles ; to (10) Monghyr, six miles ; to (11) Darará, seven miles ; to (12) Kajrá, eleven miles ; and from Kajrá to Lakhísaral, eleven miles.

MANUFACTURES—IRON.—Monghyr was formerly famous for its iron works, the best firearms and swords in India being made here. In Dr. Buchanan Hamilton's time, the following articles are mentioned as being commonly made :—Double-barrel guns, rifles, single-barrel fowling-pieces, muskets, blunderbusses, ordinary matchlocks, carved matchlocks, single-barrel pistols, double-barrel pistols, tea kettles, fish kettles, iron ovens, saucepans, frying-pans, snuffers, iron colanders, chafing irons, chamber stoves or grates, kitchen stoves, ladles, ramrods, swords, spears, table knives and forks, scissors, bits for bridles, stirrup irons, horse shoes and hob nails, spurs, hatchets, hoes, padlocks, chest locks and door locks, hinges, clamps for boat-building, nails for clinker-built boats, common nails, curry-combs, sickles without teeth, spuds for cutting grass for horses, large sickles for cutting grass, sickles with teeth, palanquin and cast-iron furniture, corkscrews, razors, tongs, coarse needles, and wheel spindles. The iron requisite was obtained chiefly from Kharakpur, and was considered superior to that of Bírđhúm or Hazáribágh. At the present time a good double-barrel smoothbore, a serviceable though heavy weapon, is procurable in Monghyr for £2, and a large double-barrel pistol for £1. The art of plating sword handles and other articles with gold and silver is still carried on ; and inlaying affords occupation to some twenty families.

Iron smelting is very primitive, the furnace consisting of kneaded clay, with a rude though ingenious bellows attached. The fire is first lit in the furnace, and the ore dropped from above on it. The bellows are deserving of description. They are formed from a cylinder of wood two feet in diameter and nine inches high, hollowed out so as to leave thin edges and a thin bottom, and the top is covered with a hide, tied firmly round the mouth. The skin is itself larger than the space it covers, and can be moved up or down. In its centre is a hole about an inch in diameter, through which is passed a wooden button that holds a string tied to the end of a bamboo, which acts as a spring, and when at rest raises the skin so that its upper surface is a concave. Two of these bellows are placed close to each other. The workman who is to blow with them puts his heel on the hole in one skin and depresses it, expelling the wind by the nozzle. He then puts his other heel on the other hole, and thus, treading alternately on the two cylinders, expels the wind, while the spring raises the hide when he lifts one of his feet to throw the whole of his weight on the other. When it is wanted to increase the power, another workman stands behind, and both tread at the same time. A strange superstition is connected with this simple process, which is explained as referable to the belief in the power of the male and female influences, so common in the ruderies as well as the more advanced religions of India. A woman usually clasps her arms round the waist of the man who blows, but takes no further part in the operation.

INDIGO.—The great European industry connected with the preparation of indigo has now for a long time taken the first place amongst manufactures in this District, and still holds that position. The area under indigo cultivation is estimated at 10,000 acres, and the out-turn at 4000 *mans*, or about 143 tons. The manner of cultivation and the processes of manufacture are the same as in the neighbouring District of Tirhut, and have been fully described in the Statistical Account of that District. In 1870, the officer in charge of the Begu Saráí Subdivision, in which nearly all the chief factories are situated, furnished a return for the previous year of the amount of land under indigo cultivation, the out-turn, the labour employed, and the capital expended in the five concerns by which this industry is almost entirely carried on. The Manjhaul concern cultivated 6000 *bighás*, produced 600 *mans* of indigo, employed from 1000 to 3000 hands, and annually expended £11,500; at £25 a *man*, the

average price of Monghyr indigo in the Calcutta market, the value of the produce would be £15,000. The Begu Sarái concern cultivated 3000 *bighás*, produced 100 *mans* of indigo, employed 800 hands, and annually expended £10,000. The Bhagwánpur concern cultivated 3500 *bighás*, produced 400 *mans* of indigo, employed 1000 hands, and annually expended £10,000. The Begamsarái concern cultivated 2000 *bighás*, produced 90 *mans* of indigo, employed 600 hands, and annually expended £6000. The Daulatpur concern cultivated 6000 *bighás*, produced 400 *mans* of indigo, employed 3000 hands, and annually expended £17,000. The out-turn in 1869 was in all cases very much under the amount of produce in average years. In 1875, the Collector, Mr. Lockwood, informed me, on the authority of an experienced planter, that in average years the out-turn of Manjhaul is 1800 *mans*; Begu Sarái, 300 *mans*, Bhagwánpur, 1000 *mans*; Begamsarái, 600 *mans*. He gave no information about Daulatpur. He also estimated the total amount of land under cultivation as 16,000 *bighás*. These *bighás* are of the larger size in use on the north of the Ganges, so that the area under indigo cultivation may be put down at 10,000 acres, which corresponds with the return for 1869.

MINOR INDUSTRIES.—A coarse kind of soap is made from tallow and linseed oil, mixed in the proportion of seven parts of the first to one of the second, and boiled in a ley formed with quicklime and carbonate of soda. At Monghyr itself, bootmakers and cabinet-makers are much more skilful than in most parts of Bengal, European articles being very closely imitated. The principal ornamental woods used are those of the *tál* or palm and ebony. The manufacture of water-bottles of clay or *saráis* is carried on. The best are made of black earth obtained from near Chandísthán. For colouring them, a red clay called *gábi*, found at Sitákund, is used. Stone and slate is also cut and dressed, a large number of the *lingás* for the temples of Siva being obtained from the chlorite summits of the Monghyr hills.

The extensive slate quarries in *parganá* Abhaipur are the property of Messrs. Ambler & Co., of Monghyr; but they do not seem to be a profitable speculation. At the end of the working season of 1873-74, the Company returned a total loss of £3000 since the opening of the quarries. During the year 1874-75, the disbursements were—Wages of labourers, £587, 13s. 7½d.; carriage of slate, £54, 1s. 0½d.; purchase of materials, £22, 10s. 4d.; rent

payable at Monghyr and at quarries, £210; cost of establishment, £240, 8s. 2d.; miscellaneous expenses, £66, 17s. 5½d.: total disbursements, £1181, 10s. 7½d. The receipts were—Sale of slate, £548, 6s. 7½d.; rent, £36; miscellaneous receipts, £11: total receipts, £595, 6s. 7½d. Loss in 1874-75, £586, 4s. 0½d.

COLOURING MATERIALS.—The following account of the colouring materials used or found in the District of Monghyr is principally derived from a report on the subject drawn up by the Collector, Mr. Lockwood, in 1875. I have added at the end some information obtained from other sources. The *kusum*, or safflower, here is very inferior in quality to that produced in Lower Bengal, and is not made into cakes or prepared in any way for exportation; nor does it undergo the partial fermentation and washing employed elsewhere to remove a light yellow colour it contains, and which cannot be fixed. Eastern Bengal safflower fetches from Rs. 40. 0. 0 to Rs. 50. 0. 0 *per man*, or from £5, 12s. 0d. to £7 per hundredweight. In this District the value of the dry petals is only about Rs. 5. 0. 0 to Rs. 6. 6. 5 *per man*, or 14s. to 18s. 11d. per hundredweight. The Collector thinks it is well worthy of attention, considering the high range of prices, to ascertain whether a better description of plant could not be grown in Monghyr, and the proper processes for preparing the dye for the market introduced. The approximate extent of land under safflower, which is a cold-weather crop, he estimates at 5000 *bighás* in ordinary years. He adds: 'I do not, however, remember to have seen a field of safflower standing alone. It is grown along with mustard, poppy, and *chind*, about ten pounds of seed being required in sowing an acre, the cost of which is four *dennás* or 6d.; preparing the land may be put down as averaging Rs. 3 or 6s.' There is nothing peculiar in the method of cultivation. The flowers give three or four pickings during the year, yielding a total out-turn of eighty pounds weight per acre. They are mostly used in this District for home consumption. The leaves are merely boiled in order to extract the dye. *Láhi*, or lac-dye, obtained in the preparation of shellac, was formerly in great demand, and commanded high prices, as it was considered to give a colour nearly equal to that obtained from cochineal. But since the introduction of the aniline dyes, *láhi* has become a drug in the market. Aniline dyes, or, as they are locally called, *beláti rangs*, are in general use, and appear almost entirely to have superseded native dyes. The result has been heavy loss to the dyeing castes. *Simbrík* is

also used in Monghyr. It is a sulphate of mercury or cinnabar, imported from China, and applied as a pigment. *Haldī*, or turmeric, obtained from a species of *Curcuma*, gives a yellow dye, which, however, is not permanent. Acetate of alumina, chloride of tin, and sulphate of iron are generally used as mordants; but only the last mentioned is found in the District. *Peri* is a yellow dye, prepared from the urine of cows fed solely on mango leaves. It fetches Rs. 4 per *ser*, or 4s. a pound. In Calcutta the price is said to be just double the above, whence it is exported to Europe. One or two traders in *peri* in Monghyr paid income tax on the profits of their trade. About 200 *mans* or a little more than seven tons weight of this colour are prepared yearly in this District. The cow-keepers who trade in it are despised as '*cow destroyers*,' because the cows fed on mango leaves seldom live more than two years after they begin to eat their new fodder. *Khdkī*, or earth-coloured dye, is prepared from *haritaki* (*Terminalia chebula*), the black myrobalan of commerce, by boiling it together with *kassī*, a coarse sulphate of iron.

Dr. Buchanan Hamilton gave the following description of the processes of dyeing as practised at Monghyr in 1811, which for the colours mentioned are identical with those now employed. I have added the prices of the dyeing materials mentioned, as they now range in the markets of the District, for the sake of comparison with those given by him. The *ser* referred to is equal to 2 lbs. 2½ oz. 'In order to dye the pomegranate red, *sorakh* or *kusumī*, for three turbans twenty yards long by eighteen inches wide, take 3 *ser*s of safflower, value R. 1; of impure carbonate of soda or *saji*, 6 *chhatāks*, value ¾ *ānnā* of any vegetable acid, lime juice, mango, or tamarind, to the value of ¾ *ānnā*. Wash the flowers on a cloth strainer with six pots of water, each containing about 15 *ser*s, until the water comes off clear. This coloured water is called *pili*, and is used in dyeing green when mixed with turmeric and indigo. In about an hour after, wash the same flowers again with a further six pots of water. The water then obtained is called *dohol*, and is of no use. Express all the water from the flowers, add the soda, and rub them together. Then place them on the strainer, and with one or one and a quarter pots of water wash out the colour, which is called *sādhā*, and is the proper dye. In this dip the three turbans, and knead them in it well. Take out the cloth and add the turmeric and acid; then put in the cloth again, and having soaked it, wring

and dry it in the shade. The same operation is repeated with fresh flowers on the two following days. If a lighter colour is wanted, a little more water is added to the *sáháb*; and if a bad, cheap colour is wanted, give the cloth only one or two dips instead of three. The best *guldóbí*, or rose colour, is obtained thus:—After having extracted the *sáháb* colour as above, the dyer adds to the same flowers another pot of water, which extracts a colour called *pachuya*, sufficient to dye four turbans of the size mentioned above. They are first dipped in this dye, then taken out and an acid added, and then dipped again and dried in the sun. Each turban brings to the dyer 2 *ánnds*, and the acid costs $\frac{3}{4}$ *ánnd*. A paler rose colour is given by taking $\frac{1}{2}$ *ser* of the *sáháb* colour, adding 5 *ser*s of water, and using this in the same manner. The dyeing three turbans of a bright pomegranate brings the dyer Rs. 4. 8. 0, and the four turbans, if a rose colour, 8 *ánnds*,—in all, Rs. 5. The cost is Rs. 3. 6. 9.

'*Narangí*, or orange colour, and *sard*, or yellow, may be given either with the flowers of the *singahár* (*Nyctanthes arbor tristis*) or of the *tun* (*Cedrela toona*), both nearly of the same quality, and used in the same manner; but each turban requires 4 *chhatáks* of the former, while 6 *chhatáks* of the latter are necessary. The flowers are boiled in 3 *ser*s of water to 2 *ser*s of flowers. When cooled, add $1\frac{1}{2}$ *ser*s of the *sáháb* colour prepared as above from safflower, and one *ser* of water. In this dip the cloth, wring it, add some vegetable acid, and soak the turban in the mixture for twenty-four minutes; then wring and dry it in the shade. This makes an orange of different shades, according to the quantity of cold water added. Each turban costs for dyeing 4 *ánnds*. The yellow colour is given in the same manner, except that no *sáháb* is added, and in place of acid 1 *chhaták* of alum, worth $\frac{1}{2}$ *ánnd*, is employed. Three *ser*s of flowers also have to be boiled with 4 *ser*s of water. If a light yellow is wanted, a little cold water is added to the dye when cool.'

In 1875 the price of safflower in the District markets was $1\frac{1}{4}$ *ser*s or 2½ lbs. for the rupee; *singahár* flowers were somewhat cheaper, 3 lbs. being procurable for the same money. *Tun* flowers cost a rupee for 3 *ser*s or 6 lbs. The other materials used are not more expensive than at the beginning of this century.

COMMERCE.—Monghyr is almost solely an agricultural District, and accordingly, its export trade consists mainly of agricultural products. The chief of these are food-grains, oil-seeds, *ghí*, tobacco, sugar, and flour. There is besides a small trade in iron,

hides, lime, gunny-bags, dyes, and saltpetre. Amongst exported grains, fine rice and wheat take the principal place; the former is exported from some tracts in the south-west of the District by boat, *viâ* Sûrajgarha, and occasionally by rail, and from the neighbourhood of Kharakpur. Wheat is most cultivated in the Begu Sarâi Subdivision, and is exported from the large trade centre of Khagariâ by boat to Calcutta; much is also grown south of the Ganges, and finds its way down the railway. The Collector, in 1875, in his Annual Administration Report, states: 'When I say that half the Beg 1 Sarâi Subdivision is under wheat, and at least half the produce is exported, it will be seen that the trade in wheat is considerable.' The total acreage of this Subdivision is 492,160 acres; and the produce of a quarter of this area, at the average rate of five hundredweights to the acre, would be 24,608 tons, which represents the annual wheat export from the north of the district. Figures will be subsequently given by which the amount of the wheat export of the south may be calculated. Barley is also an article of export trade, but in a far less degree than wheat, both because it is grown in smaller quantities, and because it forms an important part of the food of the lower classes, and is therefore reserved for home consumption. Gram is largely exported southward, chiefly to feed horses in Calcutta. The chief gram-growing part of this District is the belt of land bordering the Ganges between the Shaikhpurâ Road and the river, and separated from the inner country by the Darâra and Lakhîsarâi hills. Mustard is very largely grown. In the cold weather, the fields in the *rabî* tracts on all sides are yellow with this crop. Far more is raised than is required for the District, and the surplus finds its way to Calcutta. Castor-oil is much grown, but not to the same extent as mustard, and the exports are proportionally smaller. *Til* is a large crop in the southern portion of the District, on and near the hills, and is also exported to Calcutta. *Ghi* is supplied by the buffaloes which roam over the Pharkiyâ prairies, and is exported to the southern Bengal Districts, often, largely adulterated by admixture of the oil of the *mahuâ* tree. It is sometimes sent by rail, when there is a large demand in Calcutta, but otherwise by boat from Khagariâ. The trade in agricultural products is mostly in the hands of natives of Bengal, chiefly from the metropolitan Districts and the Bardwân Division. They are mostly of the Telî and Sonâr-baniyâ castes. It may be here remarked that the nice distinction by which the

wealthy members of the former caste are called *Tilís* in Bengal, and recognised as pure *Súdras*, does not exist in Behar, where *Bráhmans* do not take water from their hands. There are fifteen principal firms, or, as they are called, *gadís*, of Bengali merchants in Monghyr District engaged in the export trade to Calcutta.

In 1872, the Collector, Mr. Barlow, obtained returns of their operations from the three largest of these firms,—that of *Bábus Rakhal Dás Sinh*, *Rájkriشنا Sinh*, and *Chandí Charn Sinh*, which is locally known as the *bará gadí*, or great firm, and has branches at *Khargariá*, *Shaikhpurá*, *Súrajgarha*, and at *Rosra* in *Darbhanga*; the firm of *Bábus Ram Mohan De* and *Mathura Mohan*; and the firm of *Bábus Síb Chandra De* and *Rádhá Krishna De*.—The figures, which were supplied by these three firms, and verified by reference to their books, are exhibited in the table on p. 145.

It may be observed that in the table referred to there is no mention of rice. The reason is that the rice trade is an up-Ganges one, in the hands of *Khatri* merchants, and consigned for the most part to towns in the *Benáres* Division. It is almost entirely river-borne, and its amount cannot be determined, as no registering station exists between its points of despatch and debarkation. Hides also form a considerable trade, carried by railway, which is chiefly in the hands of *Musalmáns*. In 1874, twenty thousand were said to have been sent to Calcutta. Tobacco is also largely exported, though, considering the low price which it obtains in the market, it is difficult to understand how its cultivation pays the cultivator. The Collector reports that a planter of *Begu Saráí*, in 1874, ‘let out about fifty *bighás* of land well manured for tobacco on the *bhdoli* system; a splendid crop was produced, and he sent his share to Cawnpur. The price realized was so small that he lost considerably by the transaction.’ The Collector, however, is not without hope; and adds: ‘I have no doubt whatever that, when sufficiently enterprising merchants are found, India will supply Europe with cigars. What we want are manufacturers to dry the leaf properly, and put the cigars in a shape which will please the consumer’s eye in England. At present tobacco manufactured in the native fashion commands only about *Rs. 2. 2. 3 a man*, or *6s. a hundredweight*.’ He estimates that five hundred tons are annually exported to different parts of *Hindustán* and *Lower Bengal*. The other exports are hardware, cheap firearms, slates,

[Sentence continued on page 148.]

RETURN OF EXPORTS TO CALCUTTA BY THREE LARGE NATIVE FIRMS OF MONGHYR TOWN,
FOR THE YEARS 1868-72

ARTICLES.	Babus Rathal Das Singh, Rajkrishna Singh, and Chandl Charn Singh.					Babus Ram Mohan De, and Mathura Mohan De.					Babus Sib Chandra De, and Radha Krishna De.					Total
	1868.	1869.	1870.	1871.	1872.	1868.	1869.	1870.	1871.	1872.	1868.	1869.	1870.	1871.	1872.	
Linseed.	17,701	19,100	13,750	15,680	26,841	18,484	10,575	8,824			2,495	4,947	6,970	12,165	13,463	170,995
Castor-oil seed.	26,000	3,080	3,675	2,950	997	2,116	1,770	5,524			1,484	381	4,735	7,090	90	53,892
Poppy seed.	1,770	650	968	3,392	1,999	1,595	2,243	1,878			431	72	42	82	43	15,075
Mustard seed.	10,709	3,140	2,198	8,580	1,263	11,615	8,149	5,169			126	672	17,800	16,025	12,894	98,340
Adi.	7,405	3,300	320	3,228	2,052	2,493	4,197	828			100	6,049	2,312	551	826	23,823
Gram.	11,325	18,369	3,372	18,723	8,612	6,421	7,391	7,601			551	8,677	1,650	16,864	9,031	96,742
Wheat.	4,930	10,857	3,937	14,826	19,495	9,858	8,289	9,286			162					18,251
Pean.	...	...	...	188	...	651	1,681	81								2,520
Arhar.	...	...	...	...	...	2,146	81									4,309
Matarri.	...	...	...	...	...	931	1,090							1,920		2,021
Chil.	423	593	674	517	420						1,857	2,390	2,510	1,701	1,280	12,365
Kandri.	...	...	...	...	...		617				29			...	...	617
TU.	...	...	...	...	...									...	...	29
Total.	80,263	59,089	33,894	68,084	61,589	56,310	46,083	39,200	..	..	7,235	23,188	36,019	50,398	37,627	598,979

STATISTICS OF GANGES-BORNE TRADE OF MONGHYR DISTRICT, FOR THE YEAR 1872.

ARTICLES.	JANUARY TO JUNE.									
	Monghyr.		Khargaria.		Suraigarha.		Minor Marts.		Total.	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.
Rice,	2,957	10,876	765	9,062	...	4,245	9,680	...	13,402	24,183
Wheat, . . . . .	...	2,485	...	...	...	90	400	...	...	2,575
Other cereals,	2,268	11,351	175	1,548	...	10,815	1,050	300	3,493	24,014
Pulses and gram, . . . . .	...	19,073	...	37,152	...	4,185	...	2,402	...	62,812
Oil-seeds,	184	...	...	202	...	...	...	...	184	202
Jute, . . . . .	...	...	...	...	...	...	...	775	...	775
Cotton, . . . . .	...	...	...	...	...	...	...	...	...	...
Cotton goods, . . . . .	...	...	...	382	...	...	...	125	...	513
Sugar, . . . . .	...	4	...	763	...	...	...	725	...	2,337
Tobacco, . . . . .	...	849	...	...	...	...	...	...	725	765
Spices and pepper,	325	765	400	...	...	...	...	735	200	3,627
Miscellaneous vegetable produce,	200	1,223	...	1,669	...	...	...	...	...	724
Timber, . . . . .	...	724	...	...	...	...	4	...	4	...
Shellac and other dyes,	328	...	...	...	...	...	...	...	328	...
Metals,	537	1,136	...	...	...	...	325	...	882	1,136
Salt,	16,611	338	26,532	...	...	...	1,500	...	44,643	338
Saltpetre, . . . . .	...	729	...	...	...	...	...	...	...	729
Hides, . . . . .	...	33	...	...	...	...	13	90	...	33
Gill, . . . . .	...	2,097	...	1,508	...	165	...	...	...	3,860
Gunny bags,	2,012	...	595	...	...	...	30	...	2,637	...
Petel-nut,	2,886	1,333	...	...	...	...	...	...	...	...
Miscellaneous, . . . . .	...	...	6,540	50	...	...	127	3,411	9,553	4,794
Total,	28,328	53,016	35,007	52,336	...	19,502	13,129	8,563	76,464	133,417

STATISTICS OF GANGES-BORNE TRADE OF MONGHYR DISTRICT, FOR THE YEAR 1872—continued.

ARTICLES.	JULY TO DECEMBER.														Total for the Year.		
	Monghyr.		Khargariá.		Súrjagarha.		Sirsiá.		Gobindpur.		Minor Mart.		Total.		Up.	Down.	Grand Total.
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.			
Rice,	2,879	74,955	1,740	40,955	...	9,136	...	...	9,950	...	7,231	...	21,800	...	35,202	...	35,202
Wheat, . . . . .	...	3,155	...	300	...	2,611	...	...	...	...	...	...	...	...	161,363	...	161,363
Other cereals,	75	...	...	...	...	...	...	...	...	...	375	1,325	450	7,391	850	9,966	10,816
Pulses and gram,	4,452	68,250	838	2,740	200	36,124	...	3,600	200	...	1,200	4,489	4,890	115,203	8,383	139,217	147,600
Oil-seeds, . . . . .	...	72,713	...	112,585	...	48,236	...	40,271	...	...	...	15,111	...	288,916	351,728	351,728	351,728
Indigo,	459	...	350	...	...	...	...	...	...	...	181	...	990	...	1,174	202	1,376
Cotton, . . . . .	...	17	...	5	...	...	...	...	...	...	...	625	...	647	1,422	1,422	1,422
Cotton goods, . . . . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sugar, . . . . .	...	1,064	...	...	...	75	...	...	...	...	...	800	...	1,939	2,452	2,452	2,452
Tobacco,	53	2,745	...	1,278	...	...	...	600	...	...	...	3,562	...	8,185	10,522	10,522	10,522
Spices and pepper,	521	552	200	25	...	...	...	...	...	...	...	...	721	577	1,446	1,342	2,788
Miscel. vegetable produce,	1,117	3,843	771	754	1,180	1,166	...	64	...	...	50	2,160	3,118	7,987	3,318	11,614	14,932
Timber, . . . . .	...	...	...	11	...	3	...	...	...	...	...	37	...	51	4	775	775
Shellac and other dyes,	78	...	...	...	...	...	...	...	...	...	...	...	78	...	406	...	406
Metals,	385	5	...	...	...	...	...	...	...	...	449	...	834	5	1,716	1,141	2,857
Salt,	36,726	1,536	39,379	57	9,769	...	...	...	...	...	1,500	1,650	87,374	3,243	132,017	3,581	135,598
Saltpetre, . . . . .	...	1,766	...	...	...	...	...	...	...	...	...	2,725	...	4,491	...	5,220	5,220
Hides, . . . . .	...	...	...	...	...	...	...	...	...	...	...	464	...	...	13	497	510
Gul, . . . . .	...	2,135	...	2,904	...	1,218	...	...	...	...	...	390	...	6,677	10,537	10,537	10,537
Gunny bags,	11,923	...	3,250	3,833	...	...	...	4,666	...	...	...	...	19,006	4,666	21,643	4,666	26,309
Betel-nut,	1,283	...	1,631	...	...	...	...	...	...	...	...	...	2,914	...	2,914	...	2,914
Miscellaneous,	437	4,823	2	204	...	915	...	7	...	...	...	1,589	439	7,538	9,992	12,332	22,324
Total,	58,388	337,559	48,161	161,818	14,982	99,484	...	49,238	10,150	...	10,986	47,091	142,667	595,190	1,931,728	607,728	1,947,738

Sentence continued from page 144.]

iron, *tasar* silk, string made from the *sábi* grass, cabinet ware, and furniture in insignificant quantities. The long plumes of the egret or paddy bird, procurable during the rains, and the long scapular feathers of the plotis or Indian snake-bird, are collected for sale. These birds affect the vast swamps in the northern part of the District, and are usually shot in the evening as they roost on the *egur* trees which stand out of the water. The plumes sell for about a guinea an ounce, but would be worth much more in England.

RIVER TRADE STATISTICS.—In 1872 a system of boat registration was established at Sáhíbganj on the Ganges, about seventy miles below the point where that river leaves this District. The river trade is largest in the last six months of the year, during the rains and for some time after. It decreases steadily during the first half of the year, and is at its lowest at the beginning of June. The table on pp. 146–147 shows the statistics of the total Ganges-borne trade of the District, which passes Sáhíbganj (both up and down stream), for the year 1872, arranged according to half-years.

STATISTICS OF RAILWAY TRAFFIC.—I am enabled, by the courtesy of Mr. Carter, traffic manager of the East India Railway, to give the following details of the export trade by railway from Monghyr District during the two half-years of 1872 and the first six months of 1875 (*vide* table on pp. 149–153). I have not given the returns for the intermediate years, because both 1873 and 1874 were largely affected by the unusual circumstances arising from the drought of the first and the great relief operations of the second year. The figures are given station by station, and are estimated in *mans* of eighty pounds weight.

It is interesting to observe how the railway-borne trade diminishes as the Ganges traffic increases, and *vice versa*. For the six months ending June 1872, the total Ganges-borne trade of Monghyr amounted to 209,881 *mans*; while the exports by rail during the same period were 421,877 *mans*. During the second half of 1872, the Ganges traffic amounted to 737,857 *mans*; while the railway exports were only 278,470.

CAPITAL is usually employed either in trade or in loans, and is not generally hoarded. The rate of interest in small loans, where the borrower pawns some article such as ornaments or household

[Sentence continued on page 154.]

RAILWAY GOODS TRAFFIC.

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RAILWAY GOODS TRAFFIC FOR 1872, AND FIRST SIX MONTHS OF 1875.

ARTICLES.	Bariápur.			Jamálpur.			Monghyr.		
	1872.		1875.	1872.		1875.	1872.		1875.
	Jan.- June.	July- Dec.	Jan.- June.	Jan.- June.	July- Dec.	Jan.- June.	Jan.- June.	July- Dec.	Jan.- June.
Betel-nuts and leaves, . . .	MANI.	MANI.	MANI.	MANI.	MANI.	MANI.	MANI.	MANI.	MANI.
Blankets,	4	112	134	133	129	124
Boots and shoes,	12	2	...	...	...	...
Brass and brassware,	41	50	...	170	23	151
Coal,	28	...	...	...	...	...	...
Copper and copperware,	90	103	24
Cotton,	25	...	...	...	73	37	18
Cotton twist,	29	81	...	...	...	3	...	44
Dye woods,	5	...	...	...	...	...
Firewood,	1014	195	...	42	...	...
Flour,	137	165	52	139	15	254
Fruits (dried),	5	63	...	2
Fruits (fresh),	24	81	...	389	664	...
Furniture,	5	28	134	11	107	16	183
Food-grains and pulses, . . .	3500	3682	11,061	476	1571	697	36,965	16,758	65,025
Glass,	2	4	7	14	...	15
Ghee and oil,	70	68	269	61	471	94	1,775
Govt. ordnance stores,
Government commis- sariat stores,
Gunny bags, . . .	24	19	10	5	6	17	283	114	540
Harness and saddlery,	6
Hemp, jute, and flax,	8	...	...	...	113
Hides and horns, . . .	62	97	20	439	199	25	6,738	2,404	7,273
Indigo,	37	13	...	170	3,468	153
Iron,	28	159	...	1401	3,006	15	69	256
Jaggery sugar,	109	63	...
Lac dye and shellac,	33	...	4
Lac refuse and stick lac,	10	...	15
Lime,	164	...	34	2,797	556
Mahul flowers,	113	...	196
Minerals,	1	...	...
Medical stores,	3	2
Oil-cake,	132	43	57	107	417
Oilman's stores and provisions,	15	...	...	...
Paper,	72	22	16	16
Piece goods,	1	...	42	53	32	479	238	904
Planks,	2	...	94	...	8
Railway materials,	3117	437	1,858	...	...	...
Roots and dry ginger,	253	279	1,153
Safflower,	3	...	5
Salt,	369	...	10	46	...	106	327	...
Saltpetre,	3,665	1,308	2,152
Sastranjis and carpets,	17	21	...	...	7	48
Seeds, . . .	2335	385	4,295	200	56	94	18,987	4,232	58,153
Silk,	4	3
Spelter and zinc,
Spices,	11	84	134
Stone (dressed)	10	...	...	...	24
Stone (rubble),	62	43,448	24	34	37
Sugar,	26	655	105	286
Tamarind,	11	...	...
Tea,	1	10	3	...	...	...
Timber, . . .	96	...	1,212	...	11	351	...	301	199
Tin and tinware,
Turmeric,	1	9	...	118	...	726
Tobacco (raw),	83	...	...	33	2,417	1,609	2,360
Tobacco (manufactured),	3	3	...	...
Wearing apparel,	15	31	27	78	...	46
Bricks,	92	...	...	...	150	...
Miscellaneous, . . .	622	508	1,588	2676	3453	2,359	3,148	5,961	3,705
Total, . . .	6639	5118	18,627	8463	8707	52,372	76,296	41,519	147,105

RAILWAY GOODS TRAFFIC OF MONGHYR DISTRICT—continued.

ARTICLES.	Daráz.			Kajrá.			Simultál.		
	1872.		1875.	1872.		1875.	1872.		1875.
	Jan.- June.	July- Dec.	Jan.- June.	Jan.- June.	July- Dec.	Jan.- June.	Jan.- June.	July- Dec.	Jan.- June.
Betel-nuts and leaves, . . .	mans.	mans.	mans.	mans.	mans.	mans.	mans.	mans.	mans.
Blankets,
Boots and shoes,	2	...	...	...	...	...
Brass and brassware,
Coal,	93	...	...	...	...	...
Copper and copperware,	7	...	...	...
Cotton,
Cotton twist,	25	...	...	...	...
Dye woods,	368	17	152
Firewood,	485	...	7,210	12,497	13,809	...	...	...
Flour,
Fruits (dried),
Fruits (fresh),	5	7	1	...	...	...
Furniture,	4	106	...	...
Food-grains and pulses, . . .	2062	1156	11,247	23,968	13,051	16,854	66	417	17
Glass,
Oil and oil,	3	...	4	1	605	987
Govt. ordnance stores,
Government commis- sariat stores,
Gunny bags,	85	54	35	37	3	...
Harness and saddlery,
Hemp, jute, and flax,
Hides and horns,	115	46	419	1	31	4
Indigo,	14	...	14	...	...	...	...
Iron,	3	1	...	...	68	173	17
Jaggery sugar,	1,169	1,272	447	...	...	...
Lac dye and shellac,	10	...	...
Lac refuse and stick lac,
Lime,	6,103	4,142	714	...	150	...
Mahul flowers,	1932	7,844	3,061
Minerals,
Medical stores,
Oil-cake,	56	280	...	1,024	...	...	...
Oilman's stores and provisions,
Paper,
Piece goods,	2	...	...	6
Planks,	72	21	...	...	...	...
Railway materials,	1080	3,142	...
Roots and dry ginger,	51	...	26	...	...	...
Safflower,
Salt,
Saltpetre,	2,460	939	1,962	...	...	...
Sastranis and carpets,
Seeds,	2,166	6,045	305	501	447	349	8,715	...
Silk,
Spelter and zinc,
Spices,
Stone (dressed),
Stone (rubble), . . .	557	2992	5,558	...	...	...	...	...	...
Sugar,	10	...	23	...	...	...
Tamarind,
Tea,
Timber,	13	...	...	...	...	...	250
Tin and tinware,
Turmeric,
Tobacco (raw),	28	3	42	...	...	...
Tobacco (manufactured),
Wearing apparel,
Bricks,
Miscellaneous, . . .	396	28	236	2,601	2,083	304	732	202	1,445
Total, . . .	3015	4661	19,293	50,201	28,201	28,201	28,201	28,201	28,201

RAILWAY GOODS TRAFFIC.

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RAILWAY GOODS TRAFFIC OF MONGHYR DISTRICT—continued.

ARTICLES.	Nawādf.		Ghidaur.				Jamūf.		
	1872.		1875.	1872.		1875.	1872.		1875.
	Jan- June.	July- Dec.	Jan- June.	Jan- June.	July- Dec.	Jan- June.	Jan- June.	July- Dec.	Jan- June.
Betel-nuts and leaves,	mans. 14	...	mans. 14	mans. 14	mans. 14	mans. 14	mans. 14	mans. 14	mans. 14
Blankets,	...	...	...	...	...	...	...	...	...
Boots and shoes,	...	...	...	...	...	...	...	...	...
Brass and brassware,	...	3	...	...	...	...	5	...	...
Coal,	...	...	...	...	...	...	53	20	39
Copper and copperware,	...	...	...	...	...	...	...	...	...
Cotton,	...	...	...	...	...	...	...	6	94
Cotton twist,	...	...	...	...	...	...	...	...	...
Dye woods,	...	...	...	...	...	...	...	...	...
Firewood,	...	...	...	...	...	...	...	96	1,000
Flour,	4	11	2	...	...	...	...	...	...
Fruits (dried),	...	5	...	...	6	...	10	...	...
Fruits (fresh),	...	12	...	...	...	...	4	...	...
Furniture,	218	18	40	...	...	3	...	...	45
Food-grains and pulses,	103	193	508	46	46	793	1,847	673	5,235
Glass,	...	...	...	4	...	...	...	...	...
Oil and oil,	29	736	1	...	9	...	85	1,290	550
Govt. ordnance stores,	...	...	...	...	...	...	...	...	...
Government commis- sariat stores,	...	...	...	...	...	...	...	...	...
Gunny bags,	3	14	15	...	...	2	81	140	220
Harness and saddlery,	...	...	...	...	...	...	...	...	...
Hemp, jute, and flax,	...	...	...	...	...	...	9	...	...
Hides and horns,	52	59	68	...	87	53	1,622	985	1,173
Indigo,	7	...	...	12	15	...	...	...	...
Iron,	387	69	...	21	...	...	...	...	89
Jaggery sugar,	240	3	...	...	...	88	333	130	334
Lac dye and shellac,	...	...	...	...	...	...	...	...	...
Lac refuse and stick lac,	...	...	...	...	...	...	...	...	...
Lime,	200	...	...	...	...	...	...	...	4,685
Mahud flowers,	1110	1373	320	126	788	728	8,266	7,381	1,274
Minerals,	...	...	...	...	...	...	...	...	...
Medical stores,	...	...	...	...	...	...	...	...	...
Oil-cake,	...	...	...	...	...	...	...	...	...
Oilman's stores and provisions,	...	...	...	...	...	...	...	...	...
Paper,	...	...	...	...	...	...	...	...	...
Piece goods,	19	3	27	16	...	...	30	28	64
Planks,	...	...	...	...	...	...	127	...	10
Railway materials,	12	...	...	...	...	...	...	...	...
Roots and dry ginger,	...	126	...	...	...	...	...	...	...
Safflower,	...	...	...	...	...	...	...	...	...
Salt,	...	...	111	...	...	...	285	...	217
Sakpetre,	...	...	...	...	...	...	...	...	1,243
Satranjis and carpets,	...	...	...	...	...	...	...	...	...
Seeds,	4764	1070	6863	241	...	164	18,456	10,101	55,902
Silk,	...	8	26	12	...	...	15	...	1
Spelter and zinc,	...	...	...	...	...	...	...	...	...
Spices,	...	...	...	1	...	...	...	...	...
Stones (dressed),	...	...	...	...	...	...	...	...	...
Stone (rubble),	...	...	...	...	...	...	...	...	...
Sugar,	...	...	3	...	...	...	113	7	41
Tamarind,	...	...	4	...	...	...	...	...	...
Tea,	...	...	...	...	...	...	...	...	...
Timber,	416	34	1062	89	128	...	154	635	1,375
Tin and tinware,	...	...	4	...	...	...	...	...	...
Turmeric,	...	...	...	...	...	...	...	98	...
Tobacco (raw),	...	...	...	...	...	...	42	...	...
Tobacco (manufactured),	35	...	...	...	...	...	...	...	...
Wearing apparel,	...	...	2	...	...	...	...	...	...
Bricks,	...	...	...	...	...	...	...	...	...
Miscellaneous,	489	289	119	546	43	277	1,220	959	1,043
Total,	8102	4026	9175	1113	1122	2108	32,757	22,551	74,654

RAILWAY GOODS TRAFFIC OF MONGHYR DISTRICT—continued.

ARTICLES	Mamanpur.			Lakhisarai			Barhiyá		
	1872.		1875	1872		1875.	1872		1875.
	Jan - June	July- Dec	Jan - June	Jan - June	July- Dec.	Jan - June	Jan - June	July- Dec	Jan - June
Betel-nuts and leaves,	mans.	mans	mans	mans.	mans.	mans	mans	mans	mans.
Blankets,	46	.	.	.	3	.	1	.	3
Boots and shoes,
Brass and brassware,	8	.	1	.	.
Coal,	.	.	.	1,384	.	1,690	.	.	.
Copper & copperware,	4	.	.	.	.
Cotton,	.	.	.	26	.	194	.	.	.
Cotton twist,	4	.	.
Dyewoods,
Firewood,	235	530	..	.	4	.	.	.	.
Flour,
Fruits (dried),	3	.	.	191	14	15	16	12	26
Fruits (fresh),	.	.	2	3	.	.	.	.	.
Furniture,	.	.	402	14,131	13,937	9,796	103,274	68,082	107,087
Food-grains & pulses,	506	99	21	.	.	.	.	.	.
Glass,
Oil and oil,	.	23	.	189	489	425	12	29	122
Govt. ordnance stores,	105	210	.	.	.	.	.	.	.
Government commissariat stores,	.	.	.	23	3	.	3	.	.
Gunny bags,	.	.	.	46	116	259	122	106	91
Harness and saddlery,
Hemp, jute, and flax,
Hides and horns,	6	.	.	1,919	1,677	1,485	604	245	18
Indigo,	7	..
Iron,	.	.	.	37	3	207	.	.	..
Jaggery sugar,	39	110	.	14	147	38	13	.	..
Lac dye and shellac,
Lac refuse & stick lac,
Lime,	333	859	.	.	..
Mahul flowers,	277	1103	.	.	.	121	.	514	...
Minerals,
Medical stores,
Oil-cake,	27	3	36
Oilman's stores and provisions,	2	..	.	.	.	.	.	.	..
Paper,
Piece goods,	20	98	.	4	10	6
Planks,	4	123	.	.	..
Railway materials,	152	149	293	.	.	..
Roots and dry ginger,	4	135	94	.	65
Safflower,	24	3	..
Salt,	237	264	381	3	78	..
Saltpetre,	2,851	1,646	2,286	1,435	.	..
Satranjis and carpets,
Seeds,	..	192	.	16,216	1,943	24,781	7,668	1,510	12,009
Silk,	599
Spelter and zinc,
Spices,
Stone (dressed),	1,634	.	.	..
Stone (rubble),	77,089	52,943	12,227	.	.	..
Sugar,	16	3	63	24	.	330
Tamarind,	10	.	...	.	.	33
Tea,	3	...
Timber,	671	.	...	...
Tin and tinware,
Turmeric,	4	...	31
Tobacco (raw),	26	..	61	20	61	88	76
Tobacco (manufactd.),	4	5	...	...	...	..
Wearing apparel,	11
Bricks,
Miscellaneous,	420	736	1245	668	4,807	257	84	5	770
Total,	1639	3003	1696	115,226	78,665	57,960	113,478	70,698	121,310

RAILWAY GOODS TRAFFIC OF MONGHYR DISTRICT—*continued.*

ARTICLES.	Total for 1872.			Total for 1875
	January-June	July-December	Grand total for the year	January-June
	<i>mans</i>	<i>mans</i>	<i>mans</i>	<i>mans</i>
Betel-nuts and leaves,	198	247	145	258
Blankets,				2
Boots and shoes,	19	2	21	
Brass and brassware,	265	104	369	190
Coal,	1,477		1,477	1,718
Copper and copperware,	90	107	197	31
Cotton,	99	43	142	331
Cotton twist,	7	54	61	125
Dyewoods,	373	17	390	152
Firewood,	8,501	13,807	22,308	14,829
Flour,	280	191	471	308
Fruits (dried),	76	11	87	7
Fruits (fresh),	629	790	1,419	42
Furniture,	462	168	630	293
Food-grains and pulses,	186,944	119,665	306,609	228,722
Glass,	20	4	24	43
Ght and oil,	858	3,541	4,402	3,995
Government ordnance stores,	105	210	315	
Government commissariat stores,	20	3	24	
Gunny bags,	686	572	1,258	1,189
Harness and saddlery,				6
Hemp, jute, and flax,	9	8	17	113
Hides and horns,	11,558	5,830	17,388	10,538
Indigo,	226	3,517	3,743	167
Iron,	529	1,745	2,274	3,737
Jaggery sugar,	1,917	1,725	3,642	907
Lac dye and shellac,	43		43	4
Lac refuse and stick lac,	10		10	15
Lime,	6,337	7,586	13,923	6,814
Mahud flowers,	11,824	19,003	30,827	5,700
Minerals,	1		1	
Medical stores,		3	3	2
Oil-cake,	364	242	606	1,576
Oilman's stores and provisions,	2		2	15
Paper,	22	16	38	88
Piece goods,	610	431	1,041	1,041
Planks,	293	27	320	141
Railway materials,	4,361	3,728	8,089	2,151
Roots and dry ginger,	398	409	807	1,379
Safflower,	27	3	30	5
Salt,	611	1,084	1,725	709
Saltpetre,	10,411	3,893	14,304	7,643
Satranjts and carpets,	17	28	45	48
Seeds,	75,359	20,143	95,502	17,117
Silk,	27	38	65	30
Spelter and zinc, . . . . .			...	599
Spices,	11	84	95	134
Stone (dressed),		10	10	1,658
Stone (rubble),	77,670	56,031	133,701	61,270
Sugar,	818	115	933	772
Tamarind,	21		21	37
Tea,	1	13	14	3
Timber,	755	1,109	1,864	5,133
Tin and unware,				4
Turmeric,	123	9	132	757
Tobacco (raw),	2,548	1,859	4,407	2,040
Tobacco (manufactured),	42	5	47	3
Wearing apparel,	93	31	124	86
Bricks,	92	150	242	...
Miscellaneous,	13,602	19,074	32,676	13,339
Total,	41,877	287,488	709,365	555,142

Sentence continued from page 148.]

vessels, varies from twenty-five to thirty per cent. per annum. In large transactions the rate varies from twelve to twenty-four per cent. per annum, according to the necessities of the borrower. When a mortgage is given upon houses or lands, the rate varies from twelve to eighteen per cent. per annum. For petty advances to the cultivators upon personal security, from twelve to thirty per cent. is exacted, according to the credit of the borrower; and if a lien on their crops be taken, the interest rarely rises above twenty-four per cent. per annum. A landed estate yields from five to ten per cent. on the purchase-money. Banking establishments exist only in Monghyr town, and to them recourse is had for large loans. The village or small town dealers are applied to in the case of small transactions.

INCOME AND INCOME TAX.—The returns obtained under the operation of the last Income Tax Law, Act viii. of 1872, which was in force from the 1st April of that year to the 31st of March 1873, contain the latest information concerning the incomes of residents of the District, and the sources from which they were derived. In that year a single proprietor of land paid income tax on an income over £10,000. The persons paying on incomes between £1000 and £10,000 a year were—5 bankers, 4 indigo manufacturers, 18 proprietors and sub-proprietors of land, 1 proprietor of houses, and 1 person deriving income from miscellaneous sources; total, 29. Those paying on incomes between £200 and £1000 were—professors of religion, 2; clerks, bailiffs, and salaried shopmen, 9; bankers and money-lenders, 34; piece goods merchants, 8; grain merchants, 20; traders in woven fabrics and dress, 4; traders in food, 2; traders in spirits, drugs, and tobacco, 3; miscellaneous trader, 1; manufacturers of indigo, 2; manufacturer of metals and machinery, 1; proprietors and sub-proprietors of land, 199; land tenants, 8; persons deriving income from sources other than Government securities, 3; person deriving income from miscellaneous sources, 1: total, 297. Those paying on incomes between £100 and £200 were 611,—of whom 4 were professors of law, 1 of medicine, 18 clerks, bailiffs, and salaried shopmen, 65 bankers and money dealers, 1 general merchant, 35 grain merchants, 2 other merchants, 21 traders in woven fabrics and dress, 2 traders in metal, 9 traders in food, 1 trader in salt, 7 traders in spirits, drugs, and tobacco, 1 trader in fuel, 3 traders in miscellaneous articles, 1 manufacturer of indigo, 361 proprietors and sub-proprietors of land,

69 tenants, 1 proprietor of houses, 5 who derived income from sources other than Government securities, and 4 who derived income from miscellaneous sources. The total amount realized was £2994, and the rate of the tax 2 *pies* in the rupee, or $1\frac{1}{4}$ per cent; from which it appears that the total value of assessable incomes over £100 in Monghyr District was £287,476.

The above figures will be more intelligible when they are compared with the corresponding figures for earlier years, due allowance being made for the increase in wealth which has undoubtedly taken place of late. In 1860-61, the first year in which income tax was levied, the payers of the tax were classified in the following way:—Professors of religion, priests, etc., 15; professors of fine arts, 4; professors of law, 54; professors of medicine, 5; servants of the community, as barbers, washermen, etc., 5; public or Government servants, 193; bankers and money-lenders, 150; goldsmiths, 25; cloth merchants, 27; grain merchants, 4; dealers in spirits and intoxicating drugs, 10; manufacturers of cloth and yarn, etc., 2; manufacturers of indigo, 11; manufacturers of oils, 15; agriculturists, including landholders and others deriving their incomes from landed property, 6866; and 268 persons deriving their incomes from miscellaneous sources: total number of payers, 7935. Of these, 6167 paid on incomes under £50; 1162 on incomes between £50 and £100; 521 between £100 and £500; 52 between £500 and £1000; 29 between £1000 and £5000; 3 between £5000 and £10,000; and 1 above £10,000. The amount of tax raised in 1860-61 was £14,110, and the rate was 4 per cent., or $7\frac{1}{2}$ *pies* in the rupee, so that the total income assessed was £352,750. In 1870-71 there were 285 incomes between £200 and £1000 a year, 29 between £1000 and £10,000, and 3 of upwards of £10,000 a year; the amount of tax raised was £15,922; and the rate was 6 *pies* in the rupee, or $3\frac{1}{2}$ per cent. In 1871-72 there were 315 incomes between £200 and £1000 a year, 28 between £1000 and £10,000, and 1 of upwards of £10,000; the total amount raised was £3933; and the rate was 2 *pies* in the rupee, or $1\frac{1}{4}$ per cent.,—one-third of the rate in the previous year, and the same as that which was in force in 1872-73.

REVENUE AND EXPENDITURE.—The gross revenue of Monghyr in 1832-33, the first year of its separate existence as a District, was £24,452, 6s. 1½d. In 1850-51 it had risen, chiefly by increases in the land and excise revenue, which had at first been largely paid

into the Bhágalpur treasury, to £107,710, 19s. 3½d. In 1860-61 it was £109,389, 8s. od. ; and in 1870-71, £161,902, 4s. 8½d. The total expenditure on civil administration at the same periods was :— £17,485, 14s. 9d. in 1832-33 ; £113,117, 17s. 5d. in 1850-51 ; £30,537, 4s. od. in 1860-61 ; and £119,724, 11s. 4½d. in 1870-71. The balance sheets, however, from which these figures are derived, contain many items of account and transfer, such as deposits and remittances, besides several which cannot be regarded as part of the Imperial revenue. The following tables give a detailed account of the financial position of the District in 1870-71, its sources of revenue, and the expenditure on each department :—

GROSS BALANCE SHEET OF THE DISTRICT OF MONGHYR FOR
THE YEAR 1870-71.

REVENUE.		
Land Revenue,	£77,678	3 9½
Excise,	21,969	10 3
Assessed Taxes,	14,610	19 1½
Law and Justice,	2,586	6 11½
Deposits, Revenue, Civil and Criminal,	20,216	13 7
Stamp Revenue,	11,189	9 1½
Post Office Revenue,	2,054	18 2½
*Messengers' Fee Fund,	1,566	14 4½
*Municipal Fund,	6,039	11 2½
*District Road Toll Fund,	564	3 4
*Local Ferry Fund,	1,595	16 9
Education Receipts,	329	17 0
Zamindari ddk Fund,	603	5 8½
Police Clothing Fund,	49	11 0½
Fund for the Improvement of Government Estates,	152	7 7½
*One per cent. Road Fund,	175	6 7½
*Pound Fund,	508	3 3½
*Circuit-house Fund,	3	11 6
*Pledership Examination Fund,	4	0 0
Rates from Wards' Estates,	3	15 3½
Total,	£161,902	4 8½

Of the above items, Deposits, Revenue, Civil and Criminal, form no part of the revenue, so that their amount must be subtracted from the total to get the net revenue, £141,685, 11s. 1½d. This also contains a number of minor receipts marked *, amounting to £10,457, 7s. 1½d., which are purely local, leaving, £131,228, 4s. 0½d. as Imperial revenue.

EXPENDITURE OF MONGHYR DISTRICT. 157

GROSS BALANCE SHEET OF THE DISTRICT OF MONGHYR—continued.

EXPENDITURE.			
Salary of Revenue and Criminal Officers, . . .	£5,907	2	6½
Establishment and Travelling Allowance of Officers, . . .	2,175	14	3½
Salary of Revenue and Civil Process Servers, . . .	639	12	6½
Revenue and Civil Contingencies, . . .	692	13	3½
Salary and Contingencies of Excise Establishment, . . .	1,523	16	0
Stamp Charges, . . .	367	12	6½
Jail Charges, . . .	1,576	14	0
Education Charges, . . .	907	0	6
Establishment and Contingencies of Small Cause Court, . . .	286	1	1½
Salary and Establishment of <i>Munsifs</i> , . . .	800	2	6
Salary of Special Sub-Registrar, . . .	220	14	8½
Establishment and Contingencies of Special Sub-Registrar, . . .	246	17	0
Ecclesiastical, . . .	242	2	4½
Salary of Gazetted Officers of Police, . . .	857	19	7½
Salary of Establishment of Police, . . .	4,995	11	2½
Travelling Allowance and Contingencies of Police, . . .	435	6	1½
Charges for Collection of Assessed Taxes, . . .	678	12	9½
*Opium Charges, . . .	60,286	10	0
*Interest on Government Loans, . . .	967	8	11½
Pensions and Charitable Allowances, . . .	755	17	2½
Assignments under Treaties and Engagements, . . .	60	0	0
Public Works Charges, . . .	1,746	0	5
Post Office Charges, . . .	1,194	5	5
<i>Malikāni</i> Payments, . . .	1,141	18	4½
†Lapsed Deposits repaid, . . .	314	5	0½
†Revenue Deposits repaid, . . .	9,535	7	7½
†Criminal Deposits repaid, . . .	910	0	10½
†Civil Deposits repaid, . . .	6,051	3	2½
†Small Cause Court Deposits repaid, . . .	2,768	8	11½
†Law and Justice Refunds, . . .	275	4	4½
Medical Services, . . .	1,041	2	8½
Messengers' Fee Fund, Revenue and Civil, . . .	270	18	2½
Pound Fund, . . .	123	16	7½
<i>Zamindāri dāk</i> Fund, . . .	534	1	0
Amalgamated District Road Fund, . . .	2,949	19	9½
Municipal Fund of Monghyr and Jamālpur, . . .	6,029	5	6½
Police Clothing Fund, . . .	215	18	0½
Total, . . .	£119,724	11	4½

Of the above items, those marked * are properly Imperial charges, and those marked † are mere matters of account, and not expenditure on the District administration. Deducting these two classes of entries, of which the totals amount to £61,253, 18s. 11½d. and £19,854, 10s. 1½d., the net expenditure will be £38,616, 2s. 3½d.

THE LAND REVENUE in 1832-33 was £38,233, 6s. od., most of which was paid at Bhágalpur. There were at that time 1049 estates and 5583 registered proprietors. The average land revenue, assessed on estates paying less than £10 a year Government revenue, £3, 18s. od. paid by each such estate, and £1, 1s. 6d. by each proprietor or coparcener; on estates paying between £10 and £100, £32, 18s. od. for each estate, and £5, 6s. od. for each proprietor; and on estates paying £100 and upwards, £202, 18s. od. for each estate, and £24, 6s. od. for each proprietor. In 1850-51 the land revenue had increased to £74,923, 12s. od., the number of estates to 3581, and the number of proprietors or coparceners to 26,933. The average land revenue, assessed on estates paying less than £10 a year Government revenue, was £1, 15s. od. paid by each estate, and 13s. 10½d. by each proprietor or coparcener; on estates paying between £10 and £100, £31, 13s. od. for each estate, and £2, 7s. 1½d. for each proprietor; and on estates paying £100 and upwards, £320, 4s. od. for each estate, and £5, 1s. 9d. for each proprietor. In 1874-75 there were 4053 estates of all kinds on the revenue-roll, and the total land revenue of the District was £94,034.

PROTECTION TO PERSON AND PROPERTY has steadily increased. In 1832-33 there was one Magisterial and one Civil and Revenue Court in Monghyr; in 1850 there were five Magisterial and eight Civil and Revenue Courts; in 1862 six Magisterial and nine Civil and Revenue Courts; in 1869 six Magisterial and ten Civil and Revenue Courts. The number of Covenanted Officers stationed in the District throughout the year was one in 1832-33, four in 1850, three in 1862, and four in 1869.

RENT LAW.—The number of rent cases instituted under the provisions of Act x. of 1859 and Act viii. (B.C.) of 1869 is returned by the Collector as follows:—In 1861-62, 1052 original suits, with 371 miscellaneous applications; in 1862-63, 881 suits, with 468 applications; in 1866-67, 1890 suits, and 1136 applications; in 1868-69, 1114 suits and 1136 applications; in 1870, 1083 suits; in 1871, 1775 suits; and in 1872, 2096 suits. It will thus be seen that these land suits, the most important of which are for enhancement of rent, have remained almost stationary since the first introduction of the Law.

THE REGULAR POLICE or Constabulary Force stood thus in 1872:—1 superior European officer, called District Superintendent, with

a salary of £840 a year; 5 subordinate officers, called inspectors, on salaries varying from £240 to £120 per annum; and 55 subordinate officers, called sub-inspectors or head constables, on salaries varying from £96 to £12 pounds a year, maintained at a total annual cost of £2670, or an average pay for all subordinate officers of £44, 10s. od., per annum; 334 constables, divided into four grades, receiving annual pay varying from £10, 16s. od. to £7, 4s. od., and maintained at a total annual cost of £2653, 4s. od., or an average pay of £7, 18s. 10d. per annum for each man. The other expenses connected with the District Police were:—A sum of £120, allowed as travelling expenses for the Superintendent, £230 for pay and travelling allowances of his establishments, and £687, 12s. od. for contingencies; bringing up the total cost of the regular police of the District to £7200, 16s. od. The Census Report of 1872 returns the area of Monghyr District at 3913 square miles, and the population at 1,812,986 souls. Compared with these figures, the total strength of the regular police force is one man to every 9·90 square miles of the District area, and one man to every 4584 of the population. The cost of maintaining this force is equal to a charge of £1, 16s. 9½d. per square mile of area, or nearly 1d. per head of the population.

THE MUNICIPAL POLICE is a small force maintained in the large towns. In 1872 it consisted of 5 officers, head constables of the 4th grade, on salaries of £12 a year; and 117 constables, receiving pay at the rates of 10s. and 12s. a month; the whole body being maintained at an annual cost of £1031, 4s. od. These charges were defrayed by means of rates, levied from the householders and traders living within the municipal limits. The Census Report of 1872 returns the total population of the two municipal towns of the District at 70,151 persons, and the number of houses at 12,688. The strength of the municipal police, as compared with this town population, gives one man to every 575 souls; the whole force being maintained at a cost of very nearly 3½d. per head of the town population, or at the rate of a house tax of 1s. 7½d. on each house.

THE RURAL POLICE is now represented only by the class of village watchmen called *chaukidars*; but formerly these were supplemented by *nigubdars*, *dakhuds*, *gordits*, and *shakrakh chaukidars*, of whom I have given a detailed description in my Account of the District of Bhágálpur. In the same place may be found what is

known of the rise of the present village police force, which first came into existence as a paid body in 1816 or 1817.

In 1866, Mr. M'Neile returned the number of rural police as follows:—*Chaukidárs*, 3949; of whom 1431 were maintained by grants of service land, 428 by the *samindárs*, and 1634 by the villagers. In 1875, the District Superintendent returned them to me as numbering 3819; of whom 3554 were Hindus, 262 Musalmáns, and 3 of other religions; 243 held lands amounting to 745 *bighás*, 2818 were paid in money at an annual cost of £4291, 12s. od., and 758 paid in land and money amounting to 632 *bighás* and £602, 10s. od. The annual value of the *chaukidári* lands is about £1200 a year; which, with the money payments, makes a total annual cost for rural police of £6094, 2s. od. Besides this the village watchmen levy various perquisites from the hamlets to which they are attached. In 1872, the year which has been uniformly adopted throughout these Accounts for the Police Statistics, the number of village policemen amounted to 3753, maintained at a total cost in money and lands of £7965, 2s. od.; compared with the area and population, there was one village watchman or *chaukidár* to every 1·04 of a square mile of the District area, or one to every 483 of the population, maintained at an estimated cost of £2, os. 8½d. per square mile of area, or 1d. per head of the population. Each village watchman had charge of 50 houses on an average, and received an average pay in money or lands of £2, 2s. 5d. per annum.

Including the regular District Police, the Municipal or Town Police, and the Rural Police, the machinery for protecting person and property in Monghyr District consisted in 1872 of a total force of 4270 officers and men, equal to an average of very nearly one man to every ·91 of a square mile as compared with the area, or of one man to every 424 souls as compared with the population. The aggregate cost of this force in 1872 was £16,197, 2s. od.; equal to a charge of about £4, 2s. 9½d. per square mile, or about 2d. per head of the population.

For police purposes, Monghyr is divided into the following ten police circles or *thánds*:—In the Headquarters Subdivision—(1) Monghyr, with a force consisting of 1 inspector, 1 sub-inspector, 3 head constables, and 13 constables. (2) Súraigarha: 1 sub-inspector, 3 head constables, and 22 constables. (3) Kharakpur: 1 sub-inspector, 2 head constables, and 14 constables. (4) Gogri:

1 sub-inspector, 3 head constables, and 13 constables. (5) Begu Saráí: 1 inspector, 1 sub-inspector, 2 head constables, and 20 constables. (6) Tegrá: 1 sub-inspector and 10 constables. (7) Shaikhpurá: 1 sub-inspector, 3 head constables, and 19 constables. (8) Sekandrá: 1 sub-inspector, 1 head constable, and 10 constables. (9) Jamúí: 1 inspector, 1 sub-inspector, 3 head constables, and 23 constables. (10) Chakáí: 1 sub-inspector, 1 head constable, and 13 constables. There are also 1 inspector, 2 head constables, and 10 constables stationed at Jamálpur. The remainder of the regular force is employed on the following services:—In the Magistrate's Court, 1 inspector, 2 head constables, and 14 constables; 3 constables on orderly duty at headquarters; 1 head constable for drill and instructing recruits; 2 head constables and 7 constables on miscellaneous duties; 2 head constables and 28 constables forming the jail guard; 1 head constable and 17 constables on the Treasury guard; and 9 constables in charge of the opium stores. There are besides 67 officers and men in the reserve lines, on leave, or available for escort duty.

CRIMINAL STATISTICS.—The working of the regular police force, under its present organization, is shown in the comparative table on p. 162, which exhibits the principal offences cognisable by the police in the years 1865, 1870, and 1874; to which, in further illustration of the crime of the District, is added a tabular statement (p. 163) of the principal offences triable on the order or summons of a Magistrate, but not directly cognisable by the police, for the years 1871, 1872, 1873, and 1874.

JAIL STATISTICS.—There are three jails in Monghyr District, viz. at the civil station of Monghyr, at Begu Saráí, and at Jamúí. The following are the statistics of the jail population of the District, for the years 1857-58, 1860-61, and 1870. The figures for the two former years must be received with caution, and looked upon as only approximately correct, owing to defects in the form of the returns from which the figures have been collated. Since 1870, however, an improved form of preparing the returns has been introduced, and the statistics for that year may be accepted as accurate.

In the year 1857-58, the first year for which materials are available, the daily average number of prisoners in the Monghyr jail was 700; the total number of criminal, civil, and under-trial prisoners

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COMPARATIVE STATEMENT OF THE PRINCIPAL OFFENCES DIRECTLY COGNISABLE BY THE POLICE IN THE
YEARS 1865, 1870, AND 1874, IN MONGHYR DISTRICT.

Description of Crime.	1865.				1870.				1874.			
	Cases.		Persons.		Cases.	Persons.		Cases.	Persons.		Cases.	Persons.
	Number reported during the Year.	Total Number under Trial.	Number Discharged or Acquitted.	Number Convicted.		Number Reported during the Year.	Total Number under Trial.		Number Reported during the Year.	Total Number under Trial.		
Rioting, or unlawful assembly,	3	7	1	6	12	87	31	55	34	42	17	86
Murder,	10	40	15	...	4	13	...	2	17	17	12	5
Attempts at murder,	2	1	1	...	3	4	...	1	2	5	...	1
Grievous hurt,	46	91	17	51	19	28	...	24	18	25	7	18
Hurt by dangerous weapon, . . . . .	...	...	...	...	3	51	19	31	3	7	...	3
DAKAI, or gang robbery,	4	23	10	...	3	9	2	7	1	13	13	...
Other robberies,	9	9	7	...	2	2	2	...	7	18	4	9
Larking, house trespass, or house-breaking,	1119	87	18	66	567	180	32	77	910	173	49	97
Wrongful restraint and confinement,	19	24	15	8	6	74	18	42	24	42	19	22
Theft,	437	466	207	266	561	635	271	228	1350	1213	283	722
Criminal breach of trust, . . . . .	...	...	...	...	15	28	11	12	46	50	12	27
Receiving stolen property,	56	132	12	107	90	170	49	105	133	231	47	175
Criminal house trespass,	209	50	12	34	157	110	50	39	75	206	58	116
Offences against the Excise Laws, . . . . .	...	...	...	...	61	83	10	71	81	81	13	76
Offences against the Railway Laws, . . . . .	...	...	...	...	67	69	15	54	68	81	17	63
Public and local nuisances,	30	40	...	40	140	208	41	167	205	512	48	403

COMPARATIVE STATEMENT OF THE PRINCIPAL OFFENCES NOT COGNISABLE BY THE POLICE IN THE YEARS
1871, 1872, 1873, AND 1874, IN MONGHYR DISTRICT.

DESCRIPTION OF CRIME.	1871.				1872.				1873.				1874.			
	Persons.		Cases.	Persons.	Cases.	Persons.		Cases.	Persons.	Cases.	Persons.		Cases.	Persons.	Cases.	Persons.
	Actually Ap- pearing before the Court.	Acquitted.		Acquitted.		Actually Ap- pearing before the Court.	Convicted.		Actually Ap- pearing before the Court.		Actually Ap- pearing before the Court.	Acquitted.		Actually Ap- pearing before the Court.		Convicted.
Offences against public justice.	87	22	124	7	55	110	40	70	121	64	121	49	71	121	49	71
False evidence, false com- plaints, and fraudulent deeds.	56	16	29	15	30	97	60	31	70	59	70	41	19	70	41	19
Offences relating to weigh- ing and measuring.	6	7	6	2	1	4	...	4	10	12	10	10	...	10	10	...
Hurt.	55	30	55	9	15	54	30	21	...	...	...	...	...	...	...	...
Criminal force.	44	30	128	123	134	350	217	135	...	...	...	...	...	...	...	...
Cheating.	21	6	8	6	11	24	11	8	...	...	...	...	...	...	...	...
Mischief.	54	40	21	81	19	188	130	56	...	...	...	...	...	...	...	...
Offences relating to marriage.	25	49	21	44	2	51	49	4	...	...	...	...	...	...	...	...
Defamation.	19	4	10	...	...	12	1	1	...	...	...	...	...	...	...	...
Offences against the Income Tax Act.	240	13	177	...	...	...	...	...	...	...	...	...	...	...	...	...
Offences against the Pound Act.	...	...	...	15	131	83	29	54	...	...	...	...	...	...	...	...
Breach of contract.

¹ Made cognisable by the police from the 1st January 1874.

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admitted during the year being 1903. The discharges were as follow :—Transferred, 138; released, 1338; escaped, 14; died, 96; executed, 1: total discharged, 1587. In 1860-61 the jail returns show a daily average prison population of 401, the total number of prisoners admitted during the year being 941. The discharges were—Transferred, 8; released, 1004; escaped, 5; died, 68; executed, 2: total discharged, 1087. In 1870 the daily average jail population was 341, the total number of prisoners admitted during the year being 1437. The discharges were—Transferred, 51; released, 1194; escaped, 3; died, 7; executed, 1: total discharged, 1256. The foregoing figures are given in a special return furnished to me by the Inspector-General of jails. The daily average number of prisoners in the Monghyr jail in 1873 was 373·5, of whom 9·5 were civil, 22 under-trial, 288 labouring convicts, and 54 non-labouring convicts; proportion of females, 9·6.

The sanitary condition of the jail has greatly improved of late years. In 1857-58 the percentage of prisoners admitted to hospital amounted to 120·92, and the deaths to 13·71 per cent. of the mean jail population. In 1860-61 the percentage of admissions to hospital was almost double, being 204·23 per cent.; and the death-rate was 16·95 per cent. of the average jail population. In 1870 the admissions into hospital had considerably fallen, being 57·77 per cent.; while the death-rate was only 2·05 per cent. of the average prison population. In 1873 the death-rate still continued low, being only 2·94 per cent., as opposed to 4·85, the general average rate for all the jails of the province.

COST OF JAIL MAINTENANCE.—The average cost of maintenance per prisoner in Monghyr jail, including rations, establishment, hospital charges, clothing, contingencies, and all other expenses except the prison police guard, is returned as follows :—In 1857-58 it was £3, 10s. 1d. per head; in 1860-61 it was £3, 7s. 2d.; and in 1870, £4, 7s. 1½d. The cost of the jail police guard in 1870 amounted to an average of 14s. 1½d. per head, making a gross charge to Government of £5, 1s. 2½d. The Inspector-General of jails in his Report for 1873 returns the total cost of the Monghyr jail, including police guard, but excluding cost of alterations and repairs, at £2558, 9s. 4d.

JAIL MANUFACTURES.—The jail manufactures and other work performed by the hard-labour prisoners contribute somewhat towards

the expense of the jails. In 1857-58 the receipts arising from the sale of prison manufactures were £416, 17s. 3d., and the value of stock remaining on hand, £252, 17s. 8½d.; the charges amounted to £467, 3s. 11d., showing an excess of receipts over charges of £202, 11s. 0d.; equal to an average earning of 19s. 10½d. by each prisoner employed in manufactures. In 1860-61 the receipts from sale of manufactures and the value of stock left in hand at the end of the year amounted to £839, 12s. 5d., and the charges to £373, 8s. 7½d., leaving an excess of receipts over charges of £466, 3s. 10d.; average earning by each prisoner employed on manufactures, £2, 9s. 4d. In 1870 the receipts from jail manufactures amounted to £510, 0s. 2d., and the charges connected with them to £393, 15s. 9½d.; excess of receipts over charges £116, 4s. 4½d.; average earning by each prisoner employed on manufactures, £2, 3s. 0½d. In 1873 the credits were £705, 11s. 7½d., and the cost of the manufacturing department £579, 11s. 2½d., leaving an actual cash profit of £126, 0s. 5d., and giving an average gross earning by each prisoner of £3, 6s. 5d., or an average net earning of 11s. 10½d. Of the 204 prisoners engaged in manufactures in the latter year, 8 were employed on gunny weaving, 14 on flour grinding, 14 on cloth weaving, 8 on blanket weaving, 18 on oil-pressing, 6 on rice husking, 54 on thread and twine spinning, 54 on carpet making, and 8 on gardening.

EDUCATIONAL STATISTICS.—The progress of education in Monghyr has not been so rapid as in some other Districts. The number of Government and aided schools was 8 in 1856-57, 11 in 1860-61, and 15 in 1870-71; showing an increase of only seven schools in the whole period of fifteen years. The increase in the total number of pupils was proportionately less in the same period, being from 439 to 627. The total cost of maintenance has increased from £435, 18s. 6½d. in 1856-57 to £1259, 4s. 3½d. in 1870-71. In 1856-57 the cost to Government was £355, 12s. 0½d., and in 1870-71 £620, 11s. 8½d. The amount realized by fees and private contributions in 1856-57 was £80, 5s. 6d., and in 1870-71, £638, 12s. 7½d., an increase of nearly eight-fold. The following comparative table, compiled from the Reports of the Director of Public Instruction for 1856-57, 1860-61, and 1870-71, exhibits the number of Government and aided schools in the District at each of these years, the number of pupils attending them, the cost of education to Government, and the amount defrayed by fees or from private sources. *See table on pp. 166, 177.*

RETURN OF GOVERNMENT AND AIDED SCHOOLS IN MONGHYR DISTRICT FOR THE YEARS
1856-57, 1860-61, AND 1870-71.

CLASSIFICATION OF SCHOOLS.	Number of Schools.		NUMBER OF PUPILS.											
			Hindus.			Muhammadans.			Others.			Total.		
	1856-57	1860-61	1856-57	1860-61	1870-71	1856-57	1860-61	1870-71	1856-57	1860-61	1870-71	1856-57	1860-61	1870-71
Government English School, .	1 ¹	1	55	37	121	27	18	47	9	5	7	91	60	175
Government Vernacular Schools,	7 ²	10	334	271	186	14	105	76	...	..	...	348	376	262
Aided English Schools, .	...	...	...	...	59	...	...	2	..	...	37	...	...	98
Aided Vernacular Schools, .	...	...	...	...	86	...	...	6	..	...	...	...	...	92
Total,	8	11	389	308	452	41	123	131	9	5	44	439	436	627

¹ The Monghyr School, founded in 1854.

² Consisting of Shaikhpur, Phalbari, Begu Sarai, founded in 1855; and Barhiya, Barhigah, Kharakpur, and Khargaria schools, founded in 1856. To these, Monghyr was added in 1857, Tegra in 1858, Gogri in 1860, and Sekandri in 1861. Begu Sarai school was closed in 1860. The schools in 1871 were—Begu Sarai (re-opened in 1870), Barhiya, Husainpur, Kharakpur, Shaikhpur, Monghyr, Tegra, Kahampur opened in 1868, and Sraizgarha founded in the same year.

³ Both at Jamalpur, one in connection with a missionary body. Such schools have Vernacular departments attached to them, and the columns opposite the class of schools show the total pupils and total cost of both the English and Vernacular departments.

RETURN OF GOVERNMENT AND AIDED SCHOOLS IN MONGHYR DISTRICT—continued.

CLASSIFICATION OF SCHOOLS.	Cost to Government.			Amount realized by Fees and Private Contributions.			Total Cost.		
	1856-57.	1860-61.	1870-71.	1856-57.	1860-61.	1870-71.	1856-57.	1860-61.	1870-71.
Government English School,	£ s. d. 321 0 11½	£ s. d. 284 0 2½	£ s. d. 259 8 0	£ s. d. 63 8 6	£ s. d. 87 18 7½	£ s. d. 343 8 6½	£ s. d. 384 9 5½	£ s. d. 371 18 10½	£ s. d. 602 16 6½
Government Vernacular Schools,	34 11 1	72 10 3½	225 7 4	16 17 0	28 17 7½	32 2 1½	51 8 0½	101 7 11½	257 9 5½
Aided English Schools, ¹	...	...	121 16 4½	...	...	258 7 5	...	...	380 3 9½
Aided Vernacular Schools, . . . .	...	...	14 0 0	...	...	4 14 6	...	...	18 14 6
Total,	355 12 0½	356 10 6½	620 11 8½	80 5 6	116 16 3	638 12 7½	435 18 6½	473 6 9½	1259 4 3½

¹ Both at Jamálpur, one in connection with a missionary body. Such schools have Vernacular departments attached to them, and the columns opposite this class of schools show the total pupils and total cost of both the English and Vernacular departments.

In 1874-75 the number of Government and aided schools had increased to 229, in consequence of the introduction of large changes in the system of primary education, whereby 180 schools received grants varying from 6s. to 10s. a month. More than half these had previously been unaided private schools. In the same year the pupils had increased in number to 6675, of whom 6023 were Hindus, 565 Musalmáns, and 87 Christians. Regarding the social status of the pupils, 13 belonged to the upper, 1669 to the middle, and 4993 to the lower classes. The total of 229 schools in Monghyr attended by 6675 pupils gives an average of one school to every 17·09 square miles of area, and one to every 7916·92 of the population, attended by one student for every 271·61 of the population. Excluding the one girls' school attended by 31 pupils, the result shows 228 schools for the male population, attended by 6644 boys. Taking the male population at 897,074, this gives one school for every 3495·94 males, and one boy attending school for every 135·02 of the male population. The following statement of schools in 1874-75 exhibits the state of public instruction in a somewhat different form than the foregoing tables, and indicates the number of unaided schools and pupils in the District. *See table on p. 169.*

HIGHER-CLASS ENGLISH SCHOOL.—There is only a single school in Monghyr District of this description, which was founded in 1854, and is situated at the headquarters station. The following account of it is given in the general Report on Public Instruction in Bengal for the year 1872-73 :—‘ Since the 1st of February last, six pupil-teachers have been appointed for the instruction of the two lowest classes in English. Two of these pupil-teachers, who receive a monthly salary of Rs. 6 (12s.), devote two hours to the work of teaching; the remaining four, on Rs. 3 (6s.) each, instruct for an hour each. The number of pupils on the rolls on the last day of the year stood at 181, against 153 on the 31st March 1872, which shows an increase of 28 pupils during the year. These 181 pupils are thus classified :—6 belong to the upper class of society, 143 to the middle class, and 30 to the lower. The rates of fees have been reduced in the two lowest classes from Rs. 1. 4 (2s. 6d.) and R. 1 (2s.) respectively, to R. 0. 8 (1s.) each, with a view to bring the institution within the reach of poor boys. In the four higher classes the rates continue as before, viz. Rs. 3 (6s.), entrance class; Rs. 2. 8 (5s.), second class; Rs. 2 (4s.), third

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SCHOOLS IN MONGHYR DISTRICT.

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RETURN OF SCHOOLS IN MONGHYR DISTRICT IN 1874-75.

Description of School	Number of Schools	Number of Pupils	Average Attendance	Number of Masters	RECEIPTS.			Total Cost.	Average Cost to Govt. of each Pupil	Total Average Cost of each Pupil.
					Fees and Fines.	Government Grant	Local Subscriptions			
<i>Higher Schools—</i>					£ s d	£ s d	£ s d	£ s d	£ s d	£ s d
Government, . . .	1	205	146	9	323 5 11½	295 10 1½	110 0 0	728 16 1½	1 8 10	3 0 9
Unaided, . . .	1	78	60	4	56 1 7½	...	91 4 4½	147 6 0	1 17 9½	1 17 9½
Total	2	283	206	13	379 7 7	295 10 1½	201 4 4½	876 2 1½	1 8 10	4 18 6½
<i>Middle Schools—</i>										
Aided English, . . .	2	187	166	9	247 7 0	123 12 0	91 6 3	462 6 0	0 13 2½	2 9 5½
Unaided Vernacular, . .	1	40	35	2	2 0 6		60 0 0	62 0 6	0 11 0½	1 11 0½
Government Vernacular, .	9	408	239	20	31 2 2½	225 11 8	26 8 0	283 1 10½	0 11 0½	0 13 10½
Total	12	635	440	31	280 9 8½	349 3 8	177 14 3	807 8 4½	1 4 3½	4 14 4
<i>Primary Schools—</i>										
Aided, . . .	203	5427	4517	204	184 10 9	892 2 8	30 0 0	1106 13 5	0 3 3½	0 4 9
Unaided, . . .	10	252	209	10	30 4 3		60 0 0½	90 4 3½	0 3 3½	0 7 2
Total,	213	5679	4726	214	214 15 0	892 2 8	90 0 0½	1196 17 8½	0 3 3½	0 11 11
<i>Normal School—</i>										
Government, . . .	1	47	23	2	4 8 10½	241 0 10½	.	245 9 9	5 2 6½	5 4 5½
Total,	1	47	23	2	4 8 10½	241 0 10½		245 9 9	5 2 6½	5 4 5½
<i>Girls' School—</i>										
Aided Girls' School, . . .	1	31	30	2	8 8 6	12 1 7½	22 13 3	43 3 4½	0 7 9½	1 7 10½
Total,	1	31	30	2	8 8 6	12 1 7½	22 13 3	43 3 4½	0 7 9½	1 7 10½
Total Government and Aided,	217	6305	5121	246	799 3 3½	1789 19 0½	280 7 6	2869 10 6½	8 6 0	13 1 1½
Total Unaided, . . .	12	370	304	16	88 6 4½		211 4 5½	299 10 9½		3 15 11½
Grand total,	229	6675	5425	262	887 9 8½	1789 19 0½	491 11 11½	3169 1 4½	8 6 0	16 17 1

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class; Rs. 1. 8 (3s.), fourth class. The total receipts from fees during the year have been £287, 6s. od., against £267, 2s. 9½d. for the previous year. The net amount of Government grant expended during the year amounted to £194, 1s. 2½d., out of £210 assigned for the support of the school. The accounts show a balance of £95, 7s. 1½d. on 31st March 1873 at the disposal of the Committee, the details of which are:—Fee fund, £17, 9s. 6¾d.; interest on Government Stock, £33, os. 2d.; and subscriptions, £44, 17s. 4¾d. The monthly cost to Government of educating each boy during the past year has been Rs. 1. 0. 8 (2s. 1d.); during the year previous the cost to Government was Rs. 1. 6. 8 (2s. 10d.). All the five boys of the highest class who went up for the last University entrance examination, held in December 1872, were successful. Out of 11 junior scholarships allotted to this circle, four have been won by Monghyr school. These scholarships are tenable for two years, and vary from Rs. 10 (£1) to Rs. 15 (£1, 10s.) a month. A pupil of the Monghyr school, who holds a second-grade scholarship of the value of Rs. 15 (£1, 10s.), was first in order of merit.

PRIMARY EDUCATION.—Before 1872 a village system of schools, such as are found in Bengal, can scarcely be said to have existed in Monghyr, except in the largest villages. The Magistrate, in reporting on the introduction of the new system in that year, writes: 'Previous to the Government orders, dated July last, four Government primary schools existed in Monghyr District,—three in the *Sadr* Subdivision, and one in the *Begu Sarál* Subdivision. In addition to these, 11 *páthsháls* were supported by the reward fund. According to the orders received, these *páthsháls* were to be discontinued. In accordance with these orders, 35 *páthsháls* were directed to be discontinued in the *Sadr* Subdivision, and 11 in the Subdivisions of *Begu Sarál* and *Chandpur*. Under subsequent orders received in the year 1873, 10 *páthsháls* were ordered to be established in the *Sadr* Subdivision, 55 in *Begu Sarál* Subdivision, and 11 in *Chandpur* Subdivision. These have all been established, and the *páthsháls* which have been reserved to meet applications for the same are being gradually made by *páthsháls* and *madrasas*. There has been great difficulty felt in carrying out these orders successfully from the want of school-rooms, although addressed on the subject, did

not come forward with any assistance. They appear to look on the education of the masses with disfavour, as though fearful that, with the spread of education, their own power and influence must decline.' The Subdivisional Officer of Begu Sarál writes: 'The sub-inspector has worked hard, and if the results produced are not quite satisfactory, I am of opinion that this is owing to the opposition he has met with on the part of the *samíndárs*, rather than to any laxity or carelessness of his own. I cannot but admit that up to the present the scheme has not been very successful. It is to be regretted that the *samíndárs* have taken upon themselves to throw difficulties in the way; but that they have done so is to the best of my belief a fact. The sub-inspector reports that as yet not a single new building has been erected as a school-house by the *samíndárs*. He also complains that the inhabitants will not send their children to be taught at the new Government *páthshálás* in many instances.' The officer at Jamúl reports: 'Altogether there are now in existence 71 *páthshálás*. Of these, 49 are new, and 22 which already existed have been aided and extended,—giving instruction to a total of 1518 boys. Although amongst these 71 *páthshálás* there is not a single *maktab*, yet it is a matter for much satisfaction that in several *páthshálás*, presided over by Hindu *gurus*, Muhammadan boys are to be found sitting side by side with Hindus of every caste, from Bráhmans down to Dosádh. The 71 schools are distributed amongst the four *tháná* jurisdictions as follows:—Jamúl, 25; Sekandrá, 15; Shaikhpurá, 16; Chakál, 15.'

AN EDUCATIONAL CENSUS was taken in the cold weather of 1873-74, in selected areas in each of the Subdivisions of the District. In each Subdivision two villages were taken, in one of which a primary or other vernacular school had been for some time established, and in the other no school existed. The results were:—

HEADQUARTERS SUBDIVISION.—Muzaffarpur, in *parganá* Kharakpur, which has an aided primary school:—Population of the village by the Census of 1872: 575 men, 629 women, 357 boys, 269 girls; total, 1830. Number of children of school-going age, that is, above six and under sixteen, 185 boys, 108 girls; total, 293. Number of children actually attending school, 69 boys. Number of population who, without having attended school regularly, can read or write any language, or can count, 75 men, 16 boys; total, 91. Number of residents in the village who can read and write Hindí, 73 men, 85 boys; total, 158. Mamál, in *parganá* Lakhanpur, in which there is no school:—Population: 521 men, 548 women,

263 boys, 225 girls; total, 1557. Number of children of school-going age, 65 boys, 7 girls; total, 72. Number of population who, without having attended school regularly, can read or write any language or can count, 12 men, 12 boys; total, 24. Number of residents in the village who can read and write Hindí, 12 men, 12 boys; total, 24.

BEGU SARAI SUBDIVISION.—Bishnúpur, in *parganá* Baliyá, which has an aided primary school:—Population: 440 men, 522 women, 257 boys, 195 girls; total, 1414. Number of children of school-going age, 306 boys, 207 girls; total, 513. Number of children actually attending school, 29 boys, 3 girls; total, 32. Number of population who, without having attended school, can read or write any language or can count, 90 men, 1 woman, 13 boys; total, 104. Number of residents in the village who can read and write Hindí, 83 men, 9 boys, 1 woman; total, 93. Sujá, in *parganá* Baliyá, in which there is no school:—Population: 244 men, 268 women, 144 boys, 137 girls; total, 793. Number of children of school-going age, 89 boys, 63 girls; total, 152. Number of population who, without having attended school regularly, can read or write any language, or can count, 7 men, 7 boys; total, 14. Number of residents in the village who can read and write Hindí, 6 men, 7 boys; total, 13.

JAMUI SUBDIVISION.—Mallahpur, in *parganá* Parbatpará, which has an aided primary school:—Population: 896 men, 1000 women, 579 boys, 453 girls; total, 2928. Number of children of school-going age, 389 boys, 231 girls; total, 620. Number of children actually attending school, 44 boys. Number of population who, without having attended school regularly, can read or write any language, or can count, 179 men, 25 boys, 1 girl; total, 205. Number of residents in the village who can read and write Hindí, 177 men, 69 boys, 1 girl; total, 247. Khíra, in *parganá* Gidhaur, in which there is no school:—Population: 645 men, 672 women, 354 boys, 302 girls; total, 1973. Number of children of school-going age, 135 boys, 81 girls; total, 216. Number of children actually attending school, 21 boys. Number of population who, without having attended school regularly, can read or write any language, or can count, 80 men, 4 boys; total, 84. Number of residents in the village who can read and write Hindí, 80 men, 25 boys; total, 105.

It appears from these figures that in a total population of 10,495 persons, living in six villages situated in different parts of the Dis-

tract, which consisted of 5275 males and 5220 females, only 520 males and 2 females, or 9·86 per cent. of males and ·04 per cent. of females, could read or write any language. Comparing the three villages in which schools had for some time been established, with those in which there was no means of education, the results are :— In the former, 398 males and 2 females in a population of 6172, consisting of 3104 males and 3068 females, or 12·50 per cent. of the males and ·06 per cent. of the females, could read or write some language ; as against 122 males and no females in a total population of 4323, consisting of 2171 males and 2152 females, or 5·62 per cent. of the males in the latter villages, where no schools existed.

THE POSTAL STATISTICS of Monghyr District show that there has been a considerable increase in the use of the post office between 1861-62 and 1870-71, particularly in the later years of that period. The number of letters increased, while the number of newspapers remained almost unchanged, and the number of parcels received fell off more than half. The following table illustrates the working of the post office in Monghyr for the years 1861-62, 1865-66, and 1871-72.

POSTAL STATISTICS OF THE MONGHYR DISTRICT, FOR THE YEARS
1861-62, 1865-66, AND 1870-71.

	1861-62.		1865-66.		1870-71.	
	Received.	De- spatched.	Received.	De- spatched.	Received.	De- spatched.
Private Letters, .	109,196	104,346	109,863	117,539	Not separately shown.	Returns not obtainable.
Service Letters, .	16,344	25,812	23,324	13,122		
Total Letters, .	125,540	130,158	133,187	130,661		
Newspapers, . .	12,316	905	9,740	1,027		
Parcels,	1,768	574	725	490		
Books,	445	110	1,155	212	1,604	
Total, . . .	140,069	131,747	144,807	132,390	237,636	...
Total Receipts ex- clusive of Sale of Postage Stamps,	£	s. d.	£	s. d.	£	s. d.
Total Expenditure,	483	5 3½	578	5 8½	927	10 10½
	664	2 3½	575	15 3½	1,023	8 0½

ADMINISTRATIVE DIVISIONS. — For administrative purposes, Monghyr District is divided into the three following Subdivisions. The population statistics are taken from the Appendix, Statements i. A and i. B, to the Census Report for 1872, and the administrative figures from the revised returns obtained through the Bengal Government.

THE SADR OR HEADQUARTERS SUBDIVISION contains a total area of 1560 square miles, with 984 villages or townships, and 133,768 houses; total population, 750,984,—of whom 665,253 or 88·6 per cent. are Hindus; 80,850 or 10·8 per cent. are Muhammadans; 33 are Buddhists; 980 or ·1 per cent. are Christians; and 3868 or ·5 per cent. are people belonging to other denominations not classified separately in the Census Report. Proportion of males of all religions in the total subdivisional population, 49·8 per cent. Average density of the population, 481 persons to the square mile; average number of villages per square mile, ·63; average number of persons per village or township, 763; average number of houses per square mile, 86; average number of inmates per house, 5·6. The subdivision comprises the four police circles (*thánás*) of Monghyr, Súraigarha, Kharakpur, and Gogri. In 1870-71 it contained 8 magisterial and 10 civil and revenue courts. The regular police consisted of 59 officers and 326 men—total, 385; the rural police or village watch (*chaukidárs*) numbered 1468 men; the Monghyr town police, 5 officers and 80 men; and the Jamálpur town police, 2 officers and 40 men. The total cost of administration and police is estimated at £4626, 19s. 6d. The first criminal court was established in the town of Monghyr in 1812, and the Revenue Deputy-Collectorate erected into a Collectorate in 1832-33.

THE BEGU SARAI SUBDIVISION was formed on the 14th February 1870. It contains an area of 769 square miles, with 703 villages or townships, and 96,915 houses; total population, 537,725,—of whom 488,366 or 90·8 per cent. are Hindus; 49,093 or 9·1 per cent. are Muhammadans; 54 Christians; and 212 of other denominations not separately classified. Proportion of males of all religions in the total subdivisional population, 48·6. Average density of population, 699 per square mile; average number of villages per square mile, ·91; average number of persons per village or township, 765; average number of houses per square mile, 126; average number of inmates per house, 5·5. The subdivision comprises the two police circles (*thánás*) of Tegrá and Baliyá. In 1870-71 it con-

tained 3 magisterial and revenue courts. The regular police consisted of 5 officers and 30 men—total, 35; and a village watch consisting of 1015 men. The Collector returns the total cost of administration and police at £2418, 4s. 5½d.

THE JAMUI SUBDIVISION was formed on the 22d July 1864. It contains a total area of 1584 square miles, with 770 villages or townships, 97,491 houses, and a total population of 524,277 souls,—of whom 459,927 or 87·7 per cent. are Hindus; 52,326 or 10·0 per cent. are Muhammadans; 1 Buddhist; 108 Christians; and 11,915 or 2·3 per cent. of other denominations not classified. Proportion of males of all religions in the total subdivisinal population, 49·9 per cent. Average density of population, 331 per square mile; average number of villages, 49 per square mile; average number of persons per village or township, 681; average number of houses per square mile, 62; average number of inmates per house, 5·4. The subdivision comprises the four police circles (*thánds*) of Shaikhpurá, Sekandrá, Jamuí, and Chakáí. The total number of courts, magisterial and revenue, in 1870-71, was 3. The regular police force consisted of 13 officers and 65 men—total, 78; and the rural police or village watch numbered 1263 men. The Collector returns the total cost of the separate administration of the subdivision in 1870-71 at £3208, 15s. 9½d.

FISCAL DIVISIONS.—The following list of the Fiscal Divisions or *pargands* comprised in Monghyr is compiled partly from the Revenue Survey Returns, and partly from the Board of Revenue's *parganá* Statistics, corrected by a special report furnished to me by the Collector. There are some discrepancies between these authorities, and the information deduced from them must be received with caution. The area, amount of land revenue, and number of estates are taken from the Board of Revenue's Return and the jurisdictions of the criminal and civil courts were obtained from the offices of the Magistrate and the Judge. The latter information is in some case true only for the greater part of the *parganá*, as these divisions are often situated in two administrative Subdivisions. The population of the *pargands* was not given in the Census statement, and has been calculated on the basis of the population to the square mile of the police division in which each *parganá* is entirely or mostly situated. These approximations are very nearly correct.

(1) ABHAIPUR : contains an area of 13,021 acres, or 20·34 square miles. It consists of 2 estates; pays an annual Government land

revenue of £6, 14s. od. ; has a population of 10,109 souls ; and is subject to the jurisdiction of the Magistrate's and Munsif's Courts at Monghyr.

(2) **AKBARPUR RANI** : area, 4709 acres, or 7·36 square miles ; 21 estates ; land revenue, £345, 6s. od. ; population, 52,771 ; Magistrate's and Munsif's Courts at Begu Sarái, and Small Cause Court at Monghyr.

(3) **AMARTHU** : area, 132,101 acres, or 206·40 square miles ; 172 estates ; land revenue, £12,029, 18s. od. ; population, 53,044 ; Magistrate's and Munsif's Courts at Jamúí.

(4) **BADA BHUSARI** : area, 10,273 acres, or 16·05 square miles ; 64 estates ; land revenue, £828, 8s. od. ; population, 10,769 ; Magistrate's and Munsif's Courts at Begu Sarái.

(5) **BEHAR (in part)** : area, 9362 acres, or 14·62 square miles ; 60 estates ; land revenue, £1526, 6s. od. ; population, 8450 ; Magistrate's and Munsif's Courts at Jamúí.

(6) **BALIYA** : area, 175,926 acres, or 274·88 square miles ; 343 estates ; land revenue, £8635, 6s. od. ; population, 184,443 ; Magistrate's and Munsif's Courts at Begu Sarái.

(7) **BHUSARI** : area, 76,512 acres, or 119·55 square miles ; 147 estates ; land revenue, £4467, 12s. od. ; population, 80,218 ; Magistrate's and Munsif's Courts at Begu Sarái.

(8) **BISTHAZARI** : area, 98,115 acres, or 153·30 square miles ; 9 estates ; land revenue, £6296, 16s. od. ; population, 39,398 ; Magistrate's and Munsif's Courts at Jamúí.

(9) **CHAKAI** : area, 292,326 acres, or 613·01 square miles ; 15 estates ; land revenue, £388, 16s. od. ; population, 101,759 ; Magistrate's and Munsif's Courts at Jamúí.

(10) **CHANDAN BHUKA** : area, 34,267 acres, or 53·54 square miles ; 6 estates ; land revenue, £112, 6s. od. ; population, 26,609 ; Magistrate's and Munsif's Courts at Jamúí.

(11) **DARARA** : area, 6725 acres, or 10·50 square miles ; 1 estate ; land revenue, £11, 12s. od. ; population, 4995 ; Magistrate's and Munsif's Courts at Monghyr.

(12) **GIDHAUR** : area, 142,733 acres, or 223·02 square miles ; 14 estates ; land revenue, £1782, 18s. od. ; population, 37,316 ; Magistrate's and Munsif's Courts at Jamúí.

(13) **IMADPUR** : area, 34,916 acres, or 54·55 square miles ; 66 estates ; land revenue, £1801, 6s. od. ; population, 34,581 ; Magistrate's and Munsif's Courts at Begu Sarái.

(14) KAJRA: area, 18,465 acres, or 28·85 square miles; 4 estates; land revenue, £1381, 14s. od.; Magistrate's and Munsif's Courts at Monghyr.

(15) KHARAKPUR: area, 121,638 acres, or 190·06 square miles; 53 villages. The return of the Board of Revenue does not give the number of estates and revenue separately; estimated population, 73,720. This Fiscal Division was the chief, though not the most extensive, of the following united *pargands*:—Chिताुलि, चंदन कपुरि, दानर सुखवार, दारार, गोदर, हान्दर, हजर तुकि, जहंगिर, खरकपुर, लखनपुर, मसर, पारबतपर, सहर, सिंगोल, सुखरारदर, तपर मनहर, उम्लु मतर, वसर, and खरहर. These all formed the vast estates of the Rájá of Kharakpur, and were known as the Mahálat Kharakpur when we took possession of this country. The following account of this estate is principally derived from a manuscript Persian history, in the possession of the family of the late proprietor.

HISTORY OF KHARAKPUR.—The original inhabitants of the country were of a caste called Kshetaurí, and were ruled by fifty-two chiefs, and it would seem were divided into as many clans. All that is known of them is, that they flourished about the time of the supremacy of the Bhars in Oudh, Gorakhpur, and probably more western districts, and shared with them a certain amount of civilisation. Dr. Buchanan Hamilton says: 'They all appear to have lived in brick houses, and to have been somewhat more civilised than the barbarians by whom they were expelled. They do not seem also to have been so turbulent, as round their houses I perceive no traces of fortifications; whereas, after their expulsion, the country was filled with small mud forts, erected chiefly by the Rájputs, but also by the officers of the Muhammadan Government.' They now claim to be of the old military caste, and say they owe their name, which is explained to mean 'husbandmen,' to the following circumstances. When Parasurám destroyed the military tribe throughout India, two of them fled to Viswakarma, the god of artists, for protection. Parasurám coming up, was about to kill them, when the god said: 'These are not Kshattriyás, but Kshetaurís.' Parasurám demanded proof of this assertion by their handling the plough, which in order to save their lives they consented to do. Dr. Buchanan Hamilton writes of them: 'Another tradition concerning the Kshetaurís is, that they were originally of the low tribe of fishermen called Chandás, and were raised to importance by one

of them who was a favourite of Rám. I have little doubt that, whether infidel mountaineers or vile fishermen, they were one of the tribes raised to military rank by Rájá Ripanjál, and that on their becoming followers of the Bráhmans, these priests invented a Puranik legend. They have now entirely adopted the manners of the Rájputs.'

This race, according to Hindu history, owes the loss of its position, its civilisation, and almost its existence, to a gross act of Hindu treachery. About the middle of the sixteenth century, three brothers of the Rájput tribe of Khandwár, named Dandú Ráj, Basdeo, and Mehndar Ráj, took service with Rájá Sesunk or Bosiya Sinh, the Kshetaurí chief of Kherhí, a small principality ten or twelve miles south-east of the modern town of Monghyr. Their ability gained them great influence in the little state, which their courage considerably extended. In the course of the wars in which they engaged, they found means of collecting round them many of their tribe-fellows; and at last, when they found themselves strong enough, rose in the night on their master, murdered him and his family, and assumed his power. They then entered on a most successful series of contests with the neighbouring chiefs, and are credited with conquering the whole fifty-two Kshetaurí Rájás. When they had firmly established themselves, Dandú Ráj, the eldest of the three, invested his eldest son, Rup Sahál, with the authority of Rájá, and committed the whole government to his management. Rájá Rup Sahál, upon his decease, was succeeded in F. S. 946 (A.D. 1539) by his eldest son, Sangrám Sahál, in whose time the Emperor Jahángír, having learned the state of things in Kharakpur, issued a summons to him to appear at Dehli. The order was disregarded, and the Emperor directed Jahángír Kulí Khán, the *subahdár* of Behar, to chastise this disobedience. For that purpose Bázá Bahádúr, a well-known commander, advanced on Kharakpur. Sangrám Sahál assembled his people, and took post at the defile of Markan, leading to his capital. Hostilities commenced with arrows and matchlocks, and continued during some days without either side gaining any advantage. At length, a foot-soldier in the service of Sangrám Sahál went over to the enemy's camp, and offered to assassinate his chief for a large reward, which was readily promised him. He took an opportunity of approaching the Rájá when at his devotions, and taking aim from behind a tree, shot him through the head. The death of their leader threw his army into confusion, and they were about to fly,

when his wife, the Rání Chandrajot, encouraged them to stand their ground. She placed her son Toral Mall at their head, and resisted her assailants for many months, until Báz Bahádúr, despairing of success and wishing to end a contest with a woman, proposed a cessation of arms. This being agreed to, it was further submitted to the Rání whether, instead of continuing in opposition to the will of the Emperor, it might not prove more conducive to her interests to repair with her family to court, and endeavour personally to obtain the Emperor's favour. Báz Bahádúr offered at the same time to become an intercessor for pardon for herself, and for the transgressions of her husband. When the Rání arrived at Dehli, her son was at first thrown into prison, but soon afterwards Báz Bahádúr succeeded in obtaining his release. When the lad appeared before the Emperor, his manner and conversation drew attention, and he was treated rather with distinction than displeasure. He was afterwards induced to change his religion and become a Musalmán, upon which occasion the title of Roz Afzun was conferred upon him, and the daughter of a noble given him in marriage. Toral Mall, however, had not the happiness of winning the affections of his wife; and his mother, the Rání Chandrajot, was under the necessity of representing to the Emperor the disagreeable predicament in which her son found himself, from his wife's refusing to live with him. The Emperor provided him with a second wife, in the person of Begá Sultána, the daughter of Murád Baksh Khán, and his own first cousin. Common report, it may be observed, refused to acknowledge her to have been so illustriously related, but it has not been denied that she had belonged to the royal *sandáná*. Toral Mall was, moreover, advanced to the rank of *mansabdár* of 3000 horse; and the command of 2000 horse was given to each of his children, Bihroz Sinh and Abdul Sinh. He also received a *farmán* creating him Rájá of Kharakpur, and investing him with the authority and rights of *milki*, *chaudharí*, and *kánungo*, with all *rasum* or dues in the Mahálát Kharakpur, and as subsistence *samlúdárí* or *nánkár*, one-eighth of *parganá* Sahrul. At the same time *parganá* Havelí Kharakpur was allotted to him to support a fitting establishment, and *parganá* Kujrá as an *áltamghá jagír*. *Parganá*s Sakharábádí, Parbatpára, Chándan Katuríá, Chandwá Passáí, Sathlári, Godda, Dánrá Sakhwára, Hazár Tukí, Handwá, and Amlu Mutiyá were also given as *áltamghá jagírs* to his two elder sons; whilst upon the third son, Thákur Sinh, who took the habit of a *darwesh*, an imperial *sanad* settled 4040 *bighás* of

land as *madad-másh*, comprehending the villages of Bhattia and Agia in *parganá* Hazár Tukl. The great extent of these grants, made at the time of his marriage with Begá Sultaná, gives credit to the alleged noble birth of that lady. Soon afterwards, Toral Mall returned to Kharakpur with his wife, leaving his son Abdul Shah in a post of honour at court, but really as an hostage for his fidelity. He died about A.D. 1635, and was succeeded by his son Báhroz, who for many years after remained at Dehli.

The Mughul historians give a somewhat different account of the life of Roz Afzún, which, as derived by Dr. Blochmann from the *Ain-i-Akbari* and the *Pádisháh-námah*, is as follows :—At the time of the conquest of Behar and Bengal by Akbar (A.D. 1574-75), there were in Behar three powerful *zamindárs*, — Rájá Gajpatí of Hájpúr, Rájá Puran Mall of Gidhaur, and Rájá Sangrá́m of Kharakpur. Gajpatí was totally ruined by the Imperialists, whom he opposed ; but Puran Mall and Sangrá́m wisely submitted, and assisted Akbar's generals in the wars with the Afgháns. When the great mutiny of Behar and Bengal broke out, Sangrá́m, though not perhaps very openly, joined the rebels, but submitted again to the Mughuls, when Akbar's general Sháhbáz Khán marched against him. He was so anxious to avoid coming into open contact with Akbar, that he handed over to Sháhbáz the strong fort of Mahdá, a place about six miles north of Kharakpur, where at the present day there are no remains of fortifications. He, moreover, never paid his respects personally at court, where his son was detained, apparently as hostage ; and he remained submissive till Akbar's death (A.D. 1605). The accession of Jahángír and the rebellion of Prince Khusru inclined him to make a final attempt to recover his independence ; and he collected his forces, which, according to Jahángír's memoirs, consisted of about 4000 horse, and a large army of foot-soldiers. Jahángír Kulí Khán Lálá Beg, Governor of Behar, lost no time in opposing him, and Singrá́m, whilst defending himself, was killed by a gunshot (A.D. 1606). Singrá́m's son, whom Jahángír calls a favourite of his, was not immediately installed on his father's death, but had to wait till A.D. 1615, when, on his conversion to Islám, he was allowed to return to Behar. He remained devoted to the service of the Emperor, and was in A.D. 1628, when Jahángír died, a commander of 1500 foot-soldiers and 700 horse. On Sháh Jahán's accession (A.D. 1628). Rájá Roz Afzún entered active service. He accompanied Mahábet Khán to

Kabul, in the war with Nazr Muhammad Khán, King of Balkh, and served later in the expedition against Jhujhár Sinh Bundelah. In the sixth year of Sháh Jahán's reign, he served under Prince Shujá in the siege of Parendah, and was promoted in the beginning of the eighth year (A.H. 1044 or A.D. 1634-35) to a command of 2000 foot and 1000 horse. He died soon afterwards, in the same year.

It was about this time that, according to the family history, another accession was made to their large estates. In the Kabul war, Bihroz conducted some enterprise of danger with entire success, and was rewarded with the grant of *chaklá* Midnapur in Bírghúm, as a *jágír*, in which he built a town and named it Kharakpur. Bihroz was succeeded by his son, Tahawwur Sinh, and he by his grandson, Arjast, who, on succeeding to the Ráj, received the title of Roz Afzun Saní. He died in F.S. 1141 (A.D. 1734), and was succeeded by an only son, Muzaffar Alí, who, being then a minor, appointed his uncle Muhammad Azim his manager, upon whose death in F.S. 1148 (A.D. 1741) he assumed the direction of affairs himself. In Muzaffar Alí's time the revolution happened in Bengal in favour of Jafar Ali Khán, who is said to have been well inclined towards him. He fell, however, under the displeasure of the next Nawáb, Kásim Alí, who sent a military force to dispossess him. He fled with his family and effects into Rámgarh, whence he was afterwards enticed by the hopes of a reconciliation; but on his arrival at Monghyr, he was seized and put under a guard of soldiers. On the downfall of Kásim Alí, Muzaffar Alí obtained his liberty, but did not recover his property. Muhammad Azíz Khán, an Afghán, was appointed to its management by the succeeding Nawáb, and remained in charge till F.S. 1173 (A.D. 1766), when he was removed, and another *ámil*, Mir Haidar Alí, sent from Murshidábád to replace him. Neither the deposed Rájá nor his eldest son ever recovered their position, but the *zamíndárí* was conferred in A.D. 1781 on his grandson, Kádir Alí, who was succeeded by Ikbál Alí Khán; after whom came Rehmat Alí, the last of the family who was Rájá of Kharakpur. In 1839 he fell into arrears of revenue, in consequence, he alleged, and as is still believed by the people, of embezzlements by his agents at Monghyr, who had quite sufficient money in their possession to pay the Government demand. The whole of this great property, except Havelí Kharakpur, was sold on the 29th January 1840; and Rájá Bidyá Nand Sinh of Purniah, and Balanáth Sahu, became the purchasers. In 1845

the remaining estate of the Rájá met with a similar fate, and was purchased by the Mahárájá of Darbhanga. Rahmat Ali Khán died in 1852, and lies buried, at his special request, at the entrance of his Imámbára. Ulfat Ali Khán and his other nephews are now living on the charity of the Mahárájá of Darbhanga, who has also made an allowance of £30 a year and a grant of fifty acres of land to his youngest widow, Rání Amír Baksh.

Dr. Buchanan Hamilton, in 1817, gave an account of this family nearly identical with that which I have derived from the Persian manuscript, and adds some information regarding its vicissitudes during the period from the time Muzaffar Ali was imprisoned by Kásim Ali, to the restoration of his grandson as Rájá of Kharakpur in 1781, by an order of Warren Hastings. It is interesting as illustrating the first decade of our rule. Whilst Mír Haidar Ali was in charge of the estate, Muzaffar's son, Faiz Ali, appealed to the British Agent at Patná, and was by him in a manner put in possession, a new *ámíl*, Abu Tálíb, being still left at Kharakpur to watch matters on behalf of the Company. This officer soon laid a charge against the Rájá, alleging that he was a turbulent man; on which account he was again deprived of all authority, his house was plundered, and his family thrown into prison, whilst he himself effected his escape into the jungle fastnesses of the rebel *ghátwál*, Jagannáth Deo. The Rájá now sent an agent to Murshidábád, and complained to Muzaffar Jang, the *faujdar* or Justice-General of the Province, who issued orders to Shítáb Rái to see justice done. On this, Faiz Ali and the other members of the Rájá's family were released from prison, and Abu Tálíb recalled. This officer, knowing the fate that awaited him, took poison; and his whole wealth was secured by Shítáb Rái, who restored nothing to the family, and sent another officer, who allowed the Rájá no more authority than before. The Rájá then sent his son, and Bholanáth his *áwdán*, with another complaint to Murshidábád, but by the way they met Shítáb Rái, who sent the son back and persuaded the *áwdán* to accompany him to Calcutta. The Rájá, knowing by this that his *áwdán* had betrayed him, sent another agent, Rúdrá Mohan by name, to Calcutta, who gave security, and obtained an order that the management of the estate should be restored to the Rájá. About this time the house of Prán Dat, the *Adwángi*, was robbed, and the *ámíl* immediately charged the Rájá with being the perpetrator, which his family of

course denied. The charge, however, was believed by Government, and a European subaltern, Mr. Clerk, with two companies of soldiers, was sent to chastise him. The Rájá retired to the forests, but sent his son to meet the officer. When the young man came within a day's journey of the troops, some treacherous *ghátwáls* informed the officer that he was not alone, and intended to fight. Whereupon the officer marched by night, and surprising the party, killed many, but the Rájá's son made his escape. After this, Mohan Sinh, a Rájput *ghátwál*, informed Mr. Clerk where the Rájá was concealed, and this officer advancing suddenly, caught him and sent him to Patná, where he was put in irons. In A.D. 1770 he petitioned against the *ghátwáls* and the *ámil*. They were called before Shítáb Rái, their accusations declared groundless, and the Rájá was released from prison, but ordered to remain at Patná. In A.D. 1776, before any further investigation took place, the Rájá died, his son Kádir All having been born a few days before, and having received the mark (*titká*) of Rájá from Prasad Sinh, who was the head of the family, although still a Hindu, and who received an annual allowance from the Rájá. But Rúdrá Mohan, the security, informed Mr. Barton, the Collector of Bhágálpur, that the Rájá had no son, and that his presumptive heir was an idiot. Some time afterwards Mr. Barton found out his deception, and in A.D. 1781 Warren Hastings ordered the whole estate of the Mahálát Kharakpur to be restored to Kádir All.

(16) KHERHI (in part): area, 39 acres, or '06 of a square mile; 1 estate; land revenue, £3, 10s. 10½d.; population, 23; Magistrate's and Munsif's Courts at Monghyr.

(17) LAKHANPUR (in part): area, 3446 acres, or 5'38 square miles; 13 estates; land revenue, £251, 2s. od.; population, 2095; Magistrate's and Munsif's Courts at Monghyr.

(18) MALDAH: area, 59,055 acres, or 92'27 square miles; 148 estates; land revenue, £4075, 18s. od.; population, 53,331; Magistrate's and Munsif's Courts at Jamúí.

(19) MALKI: area, 130,602 acres, or 204'06 square miles; 365 estates; land revenue, £7241, 6s. od.; population, 136,924; Magistrate's and Munsif's Courts at Begu-Saráí.

(20) MASJIDPUR: area, 29,452 acres, or 46'02 square miles; 27 estates; land revenue, £3147, 8s. od.; population, 30,879; Magistrate's and Munsif's Courts at Begu Saráí.

(21) MONGHYR; area, 64,012 acres, or 100'02 square miles;

554 estates; land revenue, £6225, 12s. od.; population, 83,106; Small Cause Court, Magistrate's Court, and Munsif's Court at Monghyr. The oldest traditional account of this *parganá* is, that it was formerly inhabited only by Hindu devotees and mendicants, who resided in the woods at the foot of the Monghyr hills. One of these, who lived upon a rock in the middle of the Ganges, is said, with the assistance of Visva Karna, the god and patron of artists, to have built a fort and called it Múngír. He also obtained a promise from the goddess of the river, that her waters should neither encroach upon nor abandon its walls. A Kárna Raja is also mentioned, whose charity brought pilgrims from every age, and principally Bráhmans, who attached themselves to the worship of Durga, at the still famous temple of Chandésthán, called after her title of Chandí, one of the sixteen under which she is addressed. His name is still preserved in the hill within the fort called Karna Chaura, on which the English found the remains of a building, and used it as a saluting battery. In the beginning of the reign of the Emperor Humáyun, about A.D. 1535, a Rájput named Hírarám, and a *báda-farosh* or wine-seller named Rám Rái, came in the train of the army to Monghyr, and settled there. They prospered, and in time obtained *sanads* for the tract of land which, many years later, when Shujá Sháh repaired the fort and built a palace there, acquired the name of Havelí Múngír, from *havelí*, a word of Arabic origin meaning a house. The *parganá* was divided into eleven *tarafs* or minor fiscal divisions; of which five, Mahedanpur-Mahásinh, Mahedanpur-Bakam, Banwára, Tájpur and Ismailpur, remained in the possession of the descendants of Hírarám; and four, Mahlí, Sultánpur, Búsdebpur, and Bahádurpur Ganesh, were inherited by those of Rám Rái. The latter owned also a fifth *taraf*, but had to yield it up to the powerful *samindár* of Kharakpur about F.S. 1080 (A.D. 1673), from whom the Emperor resumed it and conferred it on a Bráhman named Lakshman. The last *taraf*, Ibráhimpur, being entirely waste, was conferred on Binod Chaudharí, a relative of the Chaudharis of Monghyr, in order that he might reclaim it.

(22) NAIPUR: area, 48,752 acres, or 76·17 square miles; 196 estates; land revenue, £2804; population, 54,613; Magistrate's and Munsif's Courts at Begu Sarái.

(23) NARHAT (in part): area, 2384 acres, or 3·72 square miles; 8 estates; land revenue, £172, 4s. od.; population, 2150; Magistrate's and Munsif's Courts at Jamúf.

24) PARBATPARA : area, 125,369 acres, or 195.90 square miles ; 7 estates ; land revenue, £38, 14s. od. ; population, 50,372 ; Magistrate's and Munsif's Courts at Monghyr.

(25) PHARKIYA : area, 323,914 acres, or 506.11 square miles ; 568 estates ; revenue in 1847, £10,055, 10s. od., or an average rate of assessment of nearly 7½d. an acre ; the Small Cause Court having jurisdiction in the *parganá* is situated at the civil station of Monghyr ; estimated population, 353,694. The physical aspects of this *parganá* have already been fully described (p. 34). In 1787, Mr. Adair, the Collector of Bhágálpur, drew up a history of the proprietors of this *parganá* from which the following account is derived. Pharkiyá, before it was brought under regular government, is said to have been inhabited by a lawless tribe of Hindus of the Dosádh caste. Their depredations in the neighbouring country were represented to the Emperor Humáyun, and a Rájput, named Biswanáth Rái, was sent from Dehli to restore order. This he effected ; and afterwards, in the year 901 F.S. (A.D. 1494), he obtained the grant of a *samindárl* in that part of the country, but for what extent of land cannot now be ascertained. The *samindárl* devolved on his posterity without interruption for ten generations. But in the year 1137 F.S. (A.D. 1730), Kunjal Sinh, who, although descended from a younger branch of the family, was then *samindár*, was treacherously murdered by Rúko Sinh, a Chakwár, who plundered the country. Náráyan Dat, brother of the deceased landholder, obtained possession in the next year. He was soon after confined for arrears of rent at Patná ; and in his absence, Paspát Rái and Rúpnáráyan, Rájás of Tirhut, appear successively to have had possession of the *parganá*, but whether by authority or force is uncertain. Náráyan Dat at length obtained his release, and re-established himself in the *samindárl*, which he held until 1149 F.S. (A.D. 1742), when he was killed at Patná by one Izzat Khán, who seized upon his property. A short time afterwards, Bawání Sinh, a Pathán and inhabitant of Kharákpur, totally defeated Izzat Khán in battle, and took possession himself of the *samindárl*. He set up a right of inheritance through descent from the original proprietor, left his brother Kahán Sinh in charge, and resided at Patná. Hardat Sinh, however, the legitimate descendant of Náráyan Dat, in 1787 denied this pretension, and submitted his own claims to the *samindárl* to Wáris Alí Khán, *ámil* of Bhágálpur. Before the case could be brought to issue, news arrived of the recall of Wáris

Alf; and the same night Hardat Sinh, lest the appointment of a new *ámil* should prove any obstacle to his suit, assembled his adherents, procured admission into the place where his competitor Kalián Sinh and his four brothers were confined on account of arrear of rent, put them all to death, and took possession himself of the property in dispute. Although such a proceeding was liable to punishment even under the Mughul Government, Hardat Sinh had no hesitation in avowing his crime; and without being called to any account for it, was suffered to remain in possession of the *samindári* until 1173 F.S. (A.D. 1766), when Wáris Alf Khán, being again *ámil* of Bhágalpur, drove him out to make room for Mukam Sinh, a relative of the murdered Kalián. In the following year, however, it was thought proper to dispossess the latter, and restore Hardat Sinh, who continued in possession down to A.D. 1790. Hardat Sinh held as his *samindári*, *tappás* Rahuá, Saházari, Jamálpur, Bhorsha, Jamáidpur, Humáidpur, Sukásan, Dakáitá, Paurdagáon, and the half of *tappá* Subní Belasimri. The first four of these may be supposed to have formed a part or perhaps the whole of the original grant, as no one appeared to dispute the *samindár's* title to them; but the five other *tappás* were said to have been annexations made by the Pathán Izzat Khán during his usurpation of the *samindári*. The half-division of *tappá* Subní Belasimrí was a later acquisition, made by Hardat Sinh, when the former owner, Hem Náráyan, abandoned it in 1173. It appears from a genealogical table, furnished in 1787 by Hardat Sinh himself, that he was junior to almost the whole posterity then living of the original *samindár*. The property still continues in his family, but has been much broken up by partitions and other alienations.

(27) ROH (in part): area, 690 acres, or 1·08 square mile; 5 estates; land revenue, £10, 16s. od.; population, 277; Magistrate's and Munsif's Courts at Jamúí.

(28) SAHRUI (in part): area, 2574 acres, or 4·02 square miles; 9 estates; land revenue, £113, 12s. 10½d.; population, 664; Magistrate's and Munsif's Courts at Monghyr.

(29) SAKHRABADI: area, 44,180 acres, or 69·03 square miles; 232 estates; land revenue, £445, 2s. od.; population, 26,772; Magistrate's and Munsif's Courts at Monghyr.

(30) SALIMABAD: area, 112,117 acres, or 175·18 square miles; 610 estates; land revenue, £4499; population, 145,584; Magistrate's and Munsif's Courts at Monghyr.

(31) SAMYE: area, 11,209 acres, or 17·51 square miles; 19 estates; land revenue, £965, 10s. od.; population, 8697; Magistrate's and Munsif's Courts at Jamúí.

(32) SURAJGARHA: area, 23,419 acres, or 36·59 square miles; 175 estates; land revenue, £1514, 4s. od.; population, 18,165; Magistrate's and Munsif's Courts at Monghyr.

THE CLIMATE of Monghyr divides the year into three distinct periods. The hot season commences in the beginning of March, and continues to the middle of June; the rainy season extends to the beginning of November; and the cold weather lasts during the four remaining months of the year. In February the nights are still cold, but the days become progressively warmer. At this time, rheumatism and dysentery are apt to occur among the poorly clad, in consequence of exposure; and hooping-cough and measles often prevail in an epidemic form. March, April, and May are, as a rule, the three healthiest months in the year, as the people suffer neither from the heat in the day nor from exposure during the night. Cholera, however, sometimes makes its appearance, and by its ravages may cause a greater mortality than at any other season of the year. Thunder-storms occur during the latter part of May and the beginning of June, and occasionally continue till the end of June, in which case the regular rains do not set in till July. They do not affect the public health injuriously. The appearance of the rains ushers in the unhealthy season. Intermittent fever, dysentery, diarrhoea, and inflammation of the lungs become more prevalent, and the two latter diseases less amenable to treatment. The Dispensary returns between 1857 and 1866, inclusive, show that while 238 deaths occurred during the first half of the year, 407 deaths occurred during the latter six months. The changes of temperature are both great and sudden. An east wind renders the day hot, moist, and close. A west wind blows hot and dry during the day, but chilly at night. Catarrh and inflammation of the lungs prevail; and those who have suffered much from intermittent fever in previous years are apt to have returns of that disease. In November and December the weather is cool and pleasant; few fresh cases of sickness occur. Catarrh and inflammations cease, and those who have been suffering from intermittent fever and dysentery gradually recover strength, if protected against undue exposure. The prevailing winds in each month of the years 1872, 1873, and 1874 were as follow; where two or more directions are given,

the wind varied between the points referred to, and was rarely constant in the actual directions noted:—January 1872, west and south; 1873, south-west; 1874, west and south, chiefly west. February 1872, west and south, chiefly west; 1873, south-west; 1874, west and south. March 1872, west; 1873, south-west; 1874, north-west. April 1872, north-east and west; 1873, east and north; 1874, north-west. May 1872, east and north-east; 1873, east; 1874, north and west. June 1872, north-east; 1873, east and north-east; 1874, north and east. July 1872, east; 1873, east; 1874, east. August 1872, south-east and north-east; 1873, south-west; 1874, east. September 1872, north-east; 1873, west and south, chiefly west; 1874, east and north-east. October 1872, north and east; 1873, west and south, chiefly west; 1874, north and east. November 1872, south and west, chiefly west; 1873, north-west; 1874, west. December 1872, south and west; 1873, south-west; 1874, south-west.

The following tables show the monthly maximum and minimum thermometric readings, registered at the headquarters station during the ten years from 1865 to 1874; and the monthly rainfall in inches, for the seventeen years from 1858 to 1874. *See tables on pp. 189, 190.*

THE ENDEMIC DISEASES OF THE DISTRICT are chiefly malarial fevers in the low alluvial tract on the north of the Ganges, and in the jungly country lying between the hills in the extreme south; dysentery, diarrhoea, and other forms of bowel disease, ophthalmia, bronchitis, pneumonia, asthma, calculus, leprosy, elephantiasis, goitre, and small-pox. Of malarial fevers there are intermittent and remittent fevers, which are prevalent during the rains and the beginning of the cold weather. The intermittent form is the most commonly met with, and it usually assumes the quotidian type. Remittent fever is comparatively rare, not being much seen except in exceptionally unhealthy years. On the whole, fevers of malarial origin are not so prevalent in this District as they are in most parts of Lower Bengal. The mortality returns show that fevers account for about 70 per cent. of all deaths. This, of course, includes all diseases that show febrile symptoms in their course and end fatally, all such being grouped by the uneducated classes under this one great head. Dysentery is found at all seasons of the year, but it is perhaps most generally prevalent during the cold weather. The poorer classes suffer

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TABLE OF MAXIMUM AND MINIMUM THERMOMETRIC READINGS REGISTERED AT THE HEADQUARTERS
STATION OF MONGHYR DISTRICT, FROM 1865 TO 1874.

	1865.		1866.		1867.		1868.		1869.		1870.		1871.		1872.		1873.		1874.		Mean of each Month.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
January.	89	68	95	70	84	55	71	48	76	48	81	41	80	52	78	46	78	45	78	52	81.0	52.5
February.	96	77	99	77	95	65	77	58	84	54	87	48	87	56	87	49	90	50	86	62	88.8	59.6
March.	92	86	98	82	95	65	87	65	93	64	101	56	97	58	100	57	97	57	95	72	95.5	66.2
April.	98	84	88	82	98	78	96	70	102	71	104	62	101	69	106	60	102	66	104	81	99.9	72.3
May.	97	83	88	83	99	74	97	73	101	81	109	75	102	67	101	67	106	70	107	74	100.7	74.7
June.	90	82	87	84	99	79	87	73	95	81	105	69	93	76	107	70	105	76	96	79	96.4	76.9
July.	88	83	75	54	89	80	92	77	90	79	94	76	89	76	99	74	95	76	95	80	90.6	75.5
August.	88	84	84	55	84	79	90	78	90	79	94	75	89	76	97	74	93	76	90	81	89.9	75.7
September.	87	65	95	65	88	81	91	76	88	74	96	73	90	75	96	75	92	76	92	76	91.5	73.6
October.	67	61	81	68	85	69	90	71	86	72	93	67	90	69	93	65	91	65	88	71	86.4	67.8
November.	74	58	73	52	83	64	82	59	80	59	87	52	87	52	87	56	89	59	85	66	82.7	57.7
December.	88	64	75	54	70	54	76	54	73	56	77	46	78	52	80	51	79	47	79	61	77.5	53.9
Mean of each year.	88	76	87	69	89	69	86	67	88	68	94	61	90	65	94	62	93	64	91	71	90.0	67.2

TABLE OF THE RAINFALL REGISTERED AT THE HEADQUARTERS STATION OF MONGHYR DISTRICT
FROM 1858 TO 1874.

	1858	1859	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871	1872	1873	1874.	Monthly Average
January, .	0 60					0 70	0 75	..	0 60	1 10	0 30	0 10	0 16	...	1 25	0 34	0 40	0 37
February, .	0 90	2 60	0 20		..	..	0 02	1 20	3 00	0 85	1 65	0 02	...	0 16	0 57	...	1 26	0 73
March, .		1 35	0 25	1 15	0 85	...	0 05	1 45	...	1 65	0 58	0 64	0 07	...	...	1 06	0 33	0 55
April, .		1 60	0 20	0 35	0 40	0 90	...	1 40	1 20	0 70	...	...	0 75	1 28	0 48	0 72	0 31	0 60
May, .	1 20	1 50	0 40	4 80	0 95	0 65	0 80	5 30	..	2 70	1 63	1 59	...	1 91	0 50	1 12	1 76	0 58
June, .	4 70	17 00	2 15	5 55	9 20	3 55	2 50	3 75	6 50	13 07	3 13	4 35	5 33	11 08	1 19	5 90	15 83	6 75
July, .	6 00	8 85	10 28	15 90	8 00	6 95	24 60	15 05	5 20	6 62	8 61	15 65	8 81	16 87	13 20	13 31	11 48	11 49
August, .	17 40	11 30	6 28	3 05	9 80	10 90	7 60	5 86	10 10	8 15	12 67	6 02	38 59	12 66	9 28	15 32	8 68	11 39
September, .	10 00	8 90	6 80	11 75	4 15	14 80	5 10	1 80	13 50	5 25	3 31	6 90	8 39	13 08	10 89	3 61	13 07	8 31
October, .	7 00	13 15	0 30	17 15	7 10	2 00	0 50	...	5 40	3 40	0 02	2 20	8 59	0 48	3 63	...	6 52	4 56
November, .	...			0 30	...	0 40	..	..	..	..	..	...	...	...	..	0 02	...	0 04
December, .	...	0 20		0 15	..	...	..	1 00	...	...	0 40	...	...	...	...	0 04	...	0 10
Total, .	47 80	66 45	26 86	60 15	40 45	40 85	41 92	36 81	45 50	43 49	32 30	37 47	70 69	57 52	40 99	41 44	59 64	46 48

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most from it, a fact which may be attributed to their greater exposure to the vicissitudes of temperature, and also, no doubt, to bad food, scanty clothing, and other privations. Diarrhœa is also met with at all seasons, but is most common at the beginning and end of the rains. Diarrhœa and dysentery account for about 3 per cent. of the total mortality. Ophthalmia is very common among all classes during the months of April and May, when the hot west winds, loaded with dust, are blowing. It is often only a mild form of conjunctivitis; but among the poor it is seen as purulent ophthalmia, resulting in total destruction of the eye, or in the formation of permanent opacities of the cornea. Bronchitis is very common in the cold weather, and is chiefly noticed in the old and poor. Pneumonia is rare. Asthma is prevalent, chiefly among the old, but it is by no means limited to them. Calculus occurs in all parts of the District, and is mostly found in children. It is thought that it is more prevalent in the villages near Kharakpur than elsewhere. Uric acid and phosphatic calculi are the forms of this complaint most usually met with. Leprosy, or Elephantiasis Græcorum, is very commonly seen all over the District. Two varieties of this disease are equally common, — the tubercular Elephantiasis, Græcorum tuberculata; and the anæsthetic or atrophic type, Elephantiasis Græcorum anæsthetica. They are mostly found among the lower castes, such as the Dosádhs, Musádhars, and Doms, but also among Muhammadans and the higher-caste Hindus. Nothing is known definitely as to its cause. Some sufferers attribute it to syphilis, some to heredity, but the larger number can assign no cause except that it was given them as a mark of divine favour or displeasure. It occurs at all ages, but generally begins after 20. It is perhaps more common among males than females. What the duration of the disease may be has not been ascertained, but there are some patients at present attending the dispensary who have had the disease for 25 years and upwards. I append in the following section a detailed report on this remarkable disease. Elephantiasis Arabum is very rare. There are three or four cases in the town of Monghyr, but elsewhere it is almost unknown in the District. Goitre is found in the villages along the banks of the Gandak and the Tiljúgá, but is not met with among the people living in the hilly country about Kharakpur, or in other parts of the District. It is supposed to owe its prevalence on the banks of these

rivers to the presence of lime and magnesia found in solution in their waters. There has been no analysis to show this; but as these two rivers are said to be sources from which the large *kankar* beds found in their neighbourhood are deposited, it seems natural to conclude that salts of lime and magnesia are present in their waters. In the five years from 1869 to 1873 only four cases of goitre were treated in the dispensaries of the District,—three at Monghyr, and one at Begu Sarái. In the jail, however, five cases came under the notice of the visiting medical officer in 1873, all of which came from the Begu Sarái Subdivision. Small-pox, although it is ordinarily regarded as an epidemic, is in this District, as in every other where inoculation largely prevails, in reality an endemic, from which the people are never free.

LEPROSY.—In 1863 the Civil Surgeon drew up the following report on leprosy, in answer to a series of interrogatories circulated by the London College of Physicians. In the ‘short time,’ as he writes, during which he was able to direct attention to the subject when writing his report, no less than fifty cases came under his notice. ‘Leprosy is known in the District of Monghyr, and occurs in two distinct varieties; in very few instances as *Lepra Arabum*, or elephantiasis, and as *Lepra Græcorum*, which is extremely prevalent, and manifests itself from the very commencement under two forms, atrophy and hypertrophy. The natives of the District call all these species by the generic term *kuri*. Although in their ultimate results these two varieties of leprosy (of the Arabs and Greeks) may be considered as identical diseases,—a cachexia of a specific nature, resulting from abnormal innervation and nutrition, and ending in anæmia, impairment of the vital functions of the system, and consequently exhaustion and death,—yet at the outset and progress the characters of these two varieties are so distinctive, as to leave scarcely any doubt that we have before us two independent diseases, which differ in their origin and exciting causes, but which may be co-existent in the same individual. My reasons for believing the above to be the case are as follows:—*Lepra Arabum* shows itself more as a local affection, and may up to a certain degree of development be removed by the knife,—for instance, in the hypertrophy of the scrotum; in *Lepra Græcorum* such is not the case. There is a periodical fever in the former, distinctly perceptible; not so in the latter. *Lepra Arabum* is more prevalent in the moist climate of Bengal than in the dry Province of Behar, to which Monghyr

belongs; and I cannot help believing that, although it may be hereditary, the exciting cause thereof is in all probability the damp malarious heat which prevails in the Lower Provinces. The chief reason, however, which I beg to adduce in support of my belief in two distinct varieties, is the difference in the behaviour of the functions of the nervous system. In all well-marked cases of *Lepa Græcorum*, the first symptom observed by the patient is the impairment of the ultimate ramifications of the nervous filaments, which supply the affected part of the integument with sensation; and hence the change of the character of that organ, not only as regards its functions, but also its appearance, namely, discoloration, and in most cases a peculiarly shining aspect of the patches affected with anæsthesia.

‘The sub-varieties of the *Lepa Græcorum*, as mentioned at the beginning, I assume to be the hypertrophic and the atrophic. In the first, a patch of the size of a sixpence, or smaller, is observed on the forehead or the cheek; the latter locality appears to be more frequent; the patch is *darker* than the circumference, and is soon followed by a similar one, either in its vicinity or the opposite side, or on the lips or ears; the integument of the nose becomes thickened; distinct and isolated tubercles begin to grow, sometimes to the size of a filbert or even larger, over which the innervation continues, or if impaired at all, it is so at first but to an inconsiderable extent. In the course of time, after five or ten years, the skin of the lower extremities, especially the feet, which are often covered with an exzematous eruption, becomes hypertrophied, very much like elephantiasis; the innervation appears to be getting daily more impaired, deep fissures form on the soles and between the toes, which exude an ichorous fluid. These fissures degenerate into sores, spreading over the heel or encircling the roots of the toes, which in course of time are severed from the tarsus, in consequence of the gradual destruction of skin, muscles, and ligaments. These stumps continue, not unfrequently, as permanent running sores; or if a scar should form, it is always like what we see after cachectic ulcers, thin, shining, and discoloured. The same destructive process may be going on with the upper extremities. This I would call the hypertrophic variety of *Lepa Græcorum*. Under the atrophic variety I should class those cases in which the disease manifests itself from the commencement with local anæsthesia and a *light* discoloration of the integument. Whilst in the hypertrophic

variety the hue is one or two shades darker than the surrounding skin, in this it is quite the reverse; the absence of pigment in the rete mucosum increasing in some cases to such an extent, that perfectly white vitiligoid patches with white hair upon them make their appearance on the coloured skin. These patches appear on the vertex, the forehead, covering sometimes the whole nose, on the trunk, or on the upper and lower extremities. In size they vary from that of a pin's head to a patch that would hardly be covered by the whole hand; they are always, independently of the shade of the colour, dry and shining. The epidermis must be falling off more rapidly than in the normal state, because it is in these very patches, especially on the extremities, that the first blisters and ulcerations occur, leaving, as in the hypertrophic variety, running sores, which, however, in by far the greater number of cases heal up at first, leaving cicatrices with contraction of toes and fingers, the scars themselves assuming invariably a vitiligoid discoloration. This I never observed in cases of the hypertrophic variety which came under my notice. In Monghyr District the atrophic variety is by far the most common. It is to this form that eight out of my ten first cases belonged.

'The youngest leprotic patient I ever saw was a Musalmán boy twelve years of age, in whom the disease was said to have already existed for twelve months. The earliest symptom leading me to suspect leprosy, which the sufferer tries to conceal as long as he can, is a slight but even (not tubercular) hypertrophy of the toes, a peculiar shining appearance of the integument over them, unevenness of the nails, and fissures on the soles. The leprosy, though a loathsome and hitherto incurable disease, does not appear to be, even in its worst form, very destructive to life. The atrophic variety is, according to my limited experience, the most destructive; yet I could advance nothing beyond mere guesses in determining the period of years over which the disease may be protracted. One of my cases is a leper of twenty-five years standing, affected with the worst form of the disease, in whom the powers of reproduction do not seem to have been impaired for a number of years. Her state is very distressing now, but she may live for years yet to come. I have no reason to suppose that sex makes any difference in the frequency of the disease. I believe that all degrees and castes of the native community are subject to it. The poor and indigent are those who, by their habits or in consequence of scanty means of

subsistence, are most subject to the chances of anæmia, and appear most prone to become early victims of the complaint. Almost all the leprotic patients have the impression that some previous illness, especially cutaneous disease or syphilis, has preceded or aggravated their affliction. I believe the disease to be hereditary in many cases, although among all those whose histories I could put on record, I succeeded in one instance only in obtaining the patient's admission that there was leprosy in the family. If we are to put confidence in the general assertion of the lepers themselves, it would appear that in by far the greater number of cases the disease is not hereditary. Leprosy, in my opinion, has but an accidental connection with syphilis, though in some cases the disease is attributed to syphilis by the patient. I can adduce no case of the disease as the result of contagion. I know, however, of a very intelligent native practitioner who was not afraid to give his only daughter in marriage to a man of twenty years, although he was born of leprotic parents, and already himself showed symptoms of the affection. This case would tend to prove that, in the opinion of even educated natives, leprosy is not contagious. There is no restriction put on persons affected with the disease in Monghyr District. They are allowed to communicate freely with the rest of the community. I saw several cases obtaining considerable relief from hygienic measures, well-regulated diet, and the use of arsenic, *Asclepias gigantea*, but especially the oil and poultices of the seeds of *Chaulmugra odorata*. *Lawsonia inermis* applied in poultices has also proved beneficial. I saw indolent leprotic ulcers, which threatened to detach toes and fingers, completely healed up by *Chaulmugra*; the scars, however, were wanting in pigment and affected with anæsthesia. But this satisfactory condition, such as it was, did not last many months; because, without any apparent stimulus, small blisters formed on the scars or other parts of the body, followed by unhealthy-looking ulcerations, which, if healed over, were again succeeded by, others. These temporary cures, however, I observed merely in young subjects, and where the constitution was not broken down. I know of no case in which a spontaneous cure occurred.'

EPIDEMICS.—It is very difficult to give an account of the diseases which have been epidemic in Monghyr District, even during the last few years. Cholera is the most frequent of these diseases. In 1862 it was severe in every part of the District, and in the beginning

of April found its way into the jail. In twenty-three days there were twenty-five cases and fourteen deaths, or 56 per cent. of those attacked succumbed. The jail outbreak was most remarkable for the manner of treatment. A theory had been suggested that the ultimate cause of death was the stopping of the action of the heart by the clotting of the blood, caused by the withdrawal of its liquid elements by the drawing action of the disease. This theory has since been proved to be fallacious; but the treatment based upon it is deserving of record. It was imagined that collapse was the sign that the heart was beginning to be unable to circulate the thickened blood, and it was proposed then to have recourse to phlebotomy. The rationale of reducing the quantity of life-giving fluid, at the very time it was beginning to fail and dry up, does not readily appear. The process certainly was not a success, death ensuing in every case in which it was tried.

In 1869 cholera was very prevalent in most of the *bázárs* of the town. There were 95 cases between 18th February and 2d April, in 34 of which death followed. The Civil Surgeon did not believe that this total presented anything like a correct estimate of the severity of the outbreak, as many cases never came under any treatment whatever, and many were treated by Europeans and others who habitually keep private supplies of medicines. On the 17th April he asked for the appointment of an extra establishment, and on the 19th reported that the disease was spreading into the neighbouring villages, and was aggravated by the presence of much small-pox. On 1st June it was represented as 'raging' so far east as Bariárpur. During the famine of 1874 a large number of labourers, said to amount to four or five hundred at the time of the outbreak, were employed on the irrigation works on the river Man at Kharakpur. About the 10th of May cholera appeared amongst them, and continued until the 8th June. About a week after its appearance at the works, it broke out in a part of the *bázár* two miles distant, inhabited by some members of the cowherd caste, the persons attacked being those who used to supply milk to the labourers. There was no evidence, however, to show that the disease was originally imparted through the agency of human intercourse. Altogether 123 cases came to notice,—43 among the labourers, and 80 among the *bázár* population. The admissions to hospital ranged from 1 to 8 a day, with the exception of the 27th May, when 26 cases were registered. On

that day there was the first heavy fall of the rains, which flooded the Man, and brought down large quantities of rubbish and decaying vegetable matter that had been accumulating for months. The disease could not have been of a very malignant type, the mortality being comparatively small. Among the 123 cases only 12 deaths occurred, 8 of labourers and 4 in the *básár*. The Civil Surgeon mentions the following local circumstances as disposing to cholera. The labourers employed were generally low-caste men, including Dosádhs, Chámárs, and Santáls, who live regardless of all sanitary considerations, and eat every kind of garbage. They were badly clothed and housed, and had to work for hours in the bed of the river, in water polluted by debris and the action of machinery. The water they drank was decidedly bad, and the food supplied by the contractors was likewise of very inferior quality. Some Burmah rice was condemned by the Hospital Assistant Surgeon in charge, as unfit for food. A short time previously, a storm had blown down a great quantity of unripe mangoes, which, with the petals of the *mahuá* tree, were eaten by the labourers, and probably affected them prejudicially. The heat at the time was very intense at the foot of the hills, the thermometer standing at 106° inside the Assistant Manager's house, and 110° outside in the shade.

MORTUARY STATISTICS collected through the regular and village police are still very unsatisfactory, the rate returned in 1874 being only 6·98 per thousand, or 12,660 deaths for the whole District; of which 6997 were deaths of males, and 5663 of females, 1059 of infants under one year of age, and 1943 of children under seven. In order to arrive at more accurate figures, limited areas in the headquarters town and the subdivisional towns of Begu Sarái and Jamúí were selected, in which observations might be made under the immediate supervision of the medical and executive officers. The number of deaths with their causes registered in 1874 were:—In Monghyr area, with a population of 26,274 souls: cholera, 18; small-pox, 122; fevers, 360; bowel complaints, 76; suicides, 4; wounds, 19; accidents, 4; snake bite or injuries by wild beasts, 5; all other causes, 112: total from all causes, 741 or 28·2 per thousand of the population. Of these, 399 were deaths of males, 342 of females, 205 of children under seven years of age, and 91 of infants under one year. In Begu Sarái area, with a population of 10,016 souls, the number and causes of deaths were:—Small-pox,

6; fevers, 234; bowel complaint, 6; woundings, 3; accidents, 4; snake bite or injuries by wild beasts, 2; all other causes, 9: total from all causes, 264 or 26·35 per thousand of the population. Of these, 180 were deaths of males, 84 of females, 32 of children under seven years of age, and 51 of infants under one year. In Jamdī area, with a population of 10,410 souls, the returns were,—from cholera, 1 death; small-pox, 10; fevers, 219; bowel complaints, 16; accidents, 2; snake bite or injuries by wild beasts, 2; all other causes, 25: total from all causes, 273 or 26·22 per thousand of the population. Of these, 138 were deaths of males, 145 of females, 63 of children under seven years of age, and 71 of infants under one year.

THE KABIRAJs or Hindu physicians of Behar are possessed of a system of medicine which, in the hands of the more educated members of the profession, is on the whole rational, though founded on a vague and hypothetical knowledge. There are besides a large number of quack doctors, in league with the village *ojhās* or spirit charmers and low Brāhmans, who recommend incantations, charms, and the performance of *pūjās*. In the following list of indigenous drugs used in the native pharmacopœia, the number of aphrodisiacs is very striking. It is in this class of medicines, and amongst the people who use them, that the practice of the quacks is largest. At the outset of cholera, *kabirdjs* usually administer a pill containing opium, camphor, and nutmeg. In collapse they prescribe *rasun*, a medicine whose action is stimulating; as a diuretic, the faecal matter of mice moistened with the juice of the plantain tree is applied to the navel. When thirst is excessive, an electuary made of honey and cinnamon powder is placed on the tongue; water is given sparingly. In native medical works eight kinds of fever are described. Of these the principal are the nervous, the bilious, and the catarrhal. The most complicated form is that in which the symptoms of all these three forms are present. The remedy suited for the treatment of all kinds of fever is called *sudarshan churnā*, containing fifty medicinal substances, most of which possess febrifuge properties. Purgatives are never given at the outset. Fasting is strictly enjoined during the first four or five days of the attack. In dysentery and diarrhoea, the medicines commonly given are taken from the class of carminatives and antiperiodics. A compound medicine used in fevers contains, amongst other drugs, mercury, gold, talc, copper pyrites, and *harī*.

takt (*Terminalia chebula*). For spleen, a compound called *pān-chān* is used, which consists of the following ingredients:—Aloes, umors, lime juice from the *kāgchī*, a small and very acid variety of *Citrus acidā*, rock salt, black salt, and vinegar. For dysentery, cloves, *ajāwan*, assafoetida, rock salt, black pepper, bay leaves, and mint are used in various combinations. Cow's urine is often administered in liver disease.

INDIGENOUS DRUGS.—The following list of native drugs in use in this District is partly derived from the Civil Surgeon's return, and partly from local inquiry. The majority of the plants mentioned, which are not stated to be imported, are indigenous. A large proportion of the mineral medicines are found in the southern hills:—(1) *Adrak* (*Zinziber officinale*). Eaten with pepper in cases of indigestion. (2) *Akarkera* (*Pyrethrum parthenium*). The powder of the root is used as an expectorant. A small piece of the root inserted into the hole of a decayed tooth is said to allay the pain of toothache. (3) *Ajāwan* (*Ptychotis ajowan*). The seeds are used as a carminative in flatulent colic. (4) *Am-ki-gūllī* (*Mangifera Indica*). The powder of the seed is used as an astringent in chronic dysentery, together with opium. (5) *Amallās-ka-phal* (*Cassia fistula*). The pulp is used as a gentle laxative, in combination with other medicines. (6) *Anantdmul* (*Hemidesmus Indicus*). The root is used as a diuretic and diaphoretic; also as an alterative and tonic. (7) *Anār ki-jar-kā-chilkā* (*Punica granatum*). The root and bark are used as an anthelmintic. The rind of the fruit is used as an astringent in diarrhoea and dysentery. (8) *Aphīm* (*Papaver somniferum*), opium, a sedative and stimulant. (9) *Atlis* (*Aconitum heterophyllum*), brought from the Himālayas, where it grows at a height of 13,000 feet above the sea. The powdered root is an anti-periodic in intermittent fevers, in doses of ten to twenty grains. It is especially useful in dispelling the symptoms of fever due to malaria, before the fever has openly declared itself. (10) *Bābal-kā-gond* (*Acacia Arabica*), gum arabic. (11) *Babunā safaid* (*Artemisia vulgaris*), field camomile, used as a tonic and febrifuge. (12) *Bānslochān* or *tabashīr* (*Bambusa arundinacea*), a siliceous concrete found in the joints of bamboos; used as an aphrodisiac in doses of five to twenty grains. (13) *Banafsha* (*Viola odorata*). Used in fevers as a diaphoretic and sudorific; and for children as an emetic, in doses of twenty to twenty-four grains. This and the following (No. 14) are probably Himālayan plants, but

are said to be found in the southern hills. (14) *Bekh-banafsha* (*Iris florentina*), is imported from Kábul, and is used both as a scent and as a stimulant, in doses of five to twenty grains. (15) *Bel* (*Ægle marmelos*). A febrifuge, and the fruit is much used in dysentery. (16) *Bishnág* (*Aconitum ferox*), comes from the Himálayas, and is used as an aphrodisiac. It is spoken of by natives as *míthá zahr*, or sweet poison. One-sixteenth of a grain is the dose. (17) *Champuti*, a species of epiphytal orchid, perhaps *Dendrobium elevatum*. The dried plant is brought from Nepál, and used as a scent and as an aphrodisiac. (18) *Charas* (*Cannabis sativa*). The resinous exudation from this plant is used as a narcotic, stimulant, and aphrodisiac. One-quarter of a grain to two grains forms a dose. (19) *Chaulmugra* (*Gynocardia odorata*). The oil of the seeds is applied in itch. Taken internally it is an emetic. (20) *Chiretta* (*Ophelia chirata*). A tonic and febrifuge. (21) *Lál chitra* (*Plumbago rosea*), the *lál chitrá* of Bengal. The root is a sialogogue and vesicant; also a stimulant used to produce abortion, in doses of a half to three grains. (22) *Safaid chitra* (*Plumbago zeylanica*). An irritant and vesicant used locally; also given to produce abortion. (23) *Dálchini* (*Cinnamomum zeylanicum*), cinnamon, a native of Ceylon. Used as a carminative and stimulant. (24) *Dálshikra* (*Hydrargerum bichloridum*), corrosive sublimate. Rarely used in medicine. (25) *Dhanyá* (*Coriandrum sativum*). Used as a condiment and carminative. (26) *Dhátúni* (*Croton tiglium*). The bark of the root is used as a cathartic, and to induce abortion. (27) *Dhátúrá* (*Datura stramonium*). A common poison, of which the seeds are smoked with benefit in asthma. (28) *Dhaurá-ka-phul* (*Grislea tomentosa*), has a gum very like tragacanth. The dried flowers are a stimulant, and are used for promoting parturition. (29) *Dudiyá* (*Euphorbia thymifolia*). Used as a stimulant and laxative. (30) *Dhuku* (*Ligusticum difusum*), an umbelliferous plant, also called *janglí jáiphal*. It is aromatic and carminative. (31) *Elwa* or *musabar* (*Aloc perfoliata*), also called *ghíkumar*. Used as a purgative and externally as an astringent, the dose being from five to twenty grains. (32) *Gandha birosa* (*Boswellia thurifera*). Used externally as a stimulant ointment; internally in gonorrhœa. (33) *Gandhak*, or sulphur. Used to cure itch, and as a purgative. (34) *Gilla* (*Entada purscætha*). The seeds are used internally as an aphrodisiac and expectorant, in doses of five to twenty grains. (35) *Golmarich*

(*Piper nigrum*). A stimulant and febrifuge. (36) *Gúgal-ka-gond* (*Balsamodendron mukul*), or gum bdellium. Used as a substitute for myrrh. (37) *Gul-i-bábuná* (*Matricaria chamomilla*), or camomile flowers. A native of Persia. Used as a febrifuge and laxative, in doses of five to twenty-five grains. (38) *Habábír* (*Juniperus communis*). The dried berries are brought from Nepál, and used as a diuretic, and in the cure of gonorrhœa. (39) *Haldí* (*Curcuma longa*), or turmeric. Is given in the following prescription for enlargement of the spleen:—ten grains of *haldí*, five of bichlorate of soda, five of aloes, two of sulphate of iron, and three of rhubarb. (40) *Harítaki* (*Terminalia chebula*). The unripe fruit, known as *jángí hará*, is given with *sang jaráhat*, or steatite, and opium, to cure hæmorrhage in acute dysentery. Thirty grains of the ripe fruit, *bará hará*, are given as a purgative, with senna and black salt. (41) *Harsinghár* (*Nyctanthes arbor tristis*). Given internally in dysmenorrhœa, in doses from five grains to one scruple. (42) *Hing* (*Narthex asafoetida*), or assafoetida; a native of Persia, largely imported. Used as a carminative and digestive. (43) *Iláchi* (*Elettaria cardamomum*); brought from the Malay Archipelago. A carminative and stimulant. (44) *Imlí* or *Tetul* (*Tamarindus Indica*). Used as a laxative. (45) *Indrajab* (*Wrightia anti-dysenterica*). The seeds and bark in infusion are given in dysentery. (46) *Ingur* (red sulphuret of mercury). Not used internally. (47) *Isábgul* (*Plantago ispaghula*). The seed highly mucilaginous, and very much used as a demulcent. (48) *Jallakrí* (*Nardostachys jatamansi*), or wild valerian, supposed to be the ancient spikenard. Used as a refrigerant. (49) *Jangál* (subacetate of copper). Used in ointments. (50) *Jawáshir* (*Opoponax chironium*). Used as a stimulant. (51) *Kabáb chini* (*Piper cubeba*). Imported, and used as a stimulant to the urinary organs. (52) *Káládáná* (*Pharbitis nil*). The half roasted and powdered seeds are used as a purgative. (53) *Kóla nimak*, or black salt. Used as a digestive. (54) *Kalmí shorá*, nitrate of potash. Given internally as cooling in gonorrhœa and fever. (55) *Kamela* (*Daphne mezereon*). The seed imported from Kábul, and used as an irritant. The same name is applied to the powder of the seed-vessel of *Mallotus Phillipensis*. (56) *Kaphur* (*Camphora officinarum*). A native of the Malay Islands. Used as a stimulant externally and internally. (57) *Karbúja* (*Cucumis melo*). The seeds used in dysentery. (58) *Kirá* (*Cucumis utilissimus*). The seeds

used in dysentery. (59) *Kasmi* (*Cichorium intybus*). The flowers, infused with rose leaves, are given in dysentery. (60) *Kath* (*Acacia catechu*). Generally used as an astringent and tonic. (61) *Kath karanja* (*Guilandina bonduc*). Ten to twenty grains of the powdered seeds are given as an anti-periodic, an hour before an attack of fever is expected. (62) *Kuchilá* (*Strychnos nux vomica*). The seeds used as an anti-periodic tonic and aphrodisiac. (63) *Kutílá* (*Astragalus verus*), tragacanth. Imported from the North-West. Used as a demulcent in gonorrhœa. (64) *Laung* (*Caryophyllus aromaticus*), or oil of cloves. Imported from Ceylon. A stimulant. (65) *Lilá tútiyá*, or sulphate of copper. Used as an escharotic. (66) *Lohá-ká-lochan*, iron filings. Used as a tonic. (67) *Madar* (*Calotropis gigantea*). The powdered root is similar in effect, but inferior to *Ipecacuanha*. (68) *Mansál* or *mainchal* (*Arsenicum bi-sulphuretum*), an orange-yellow sulphuret of arsenic, composed of orpiment and realgar; given in itch and other complaints. (69) *Matt-ka-tel* (*Arachis hypogœa*). Used externally in rheumatism. (70) *Mahudá ka-bakal* (*Bassia latifolia*). The bark is used in decoction as an astringent and tonic. (71) *Mochras* (*Bombax Malabaricum*). The gum of the *simul* tree; given to children as a laxative. (72) *Mom safaid* (*Cera alba*), or white wax. Used in ointments. (73) *Mom sard* (*Cera flava*). Used in ointments. (74) *Nágeswar* (*Mesua ferrea*). Grown in gardens. The dried pistils are used like saffron in scents and spiced dishes, and the berries in fevers; the pistils are also given with sulphur internally in dyspepsia. (75) *Nasáddar* (*Ammonia murias*), muriate of ammonia. Used externally. (76) *Nirmál-ka-bij* (*Strychnos potatorum*). The seeds are used to clear water; and externally as an astringent. (77) *Nim* (*Azadirachta Indica*); the leaves and bark are used as a febrifuge, and in cutaneous diseases; in doses of forty grains to half an ounce. (78) *Nil* (*Indigofera tinctoria*). The leaves, powdered, are used as an alterative in hepatitis; given in decoction for calculus; also used externally in the treatment of wounds. (79) *Papita*, a species of *Strychnos*, perhaps *S. Ignatii* or *S. multiflora*, a native of the Philippines. The seed used as a narcotic and stimulant; in doses of a quarter-grain to four grains. It is also a poison. (80) *Párd* (*Hydrargerum*), quicksilver. Used internally as an alterative and purgative. Dose, a quarter-grain to two grains mixed with *ghí*. (81) *Palang* (*Hæmatoxylon Campeachianum*). Imported; whence I cannot learn. Used as an astringent in diarrhœa. (82) *Piplamor*

(*Piper longum*), the root of the long pepper. Used as a stimulant, in doses of five grains to one scruple. (83) *Phitkari*, super-sulphate of alumina and potash (alum). Used internally and externally. (84) *Posf-ka-tel* (*Oleum papaveris*), or poppy-oil. (85) *Raf* (*Sinapis nigra* and *S. dichotoma*); several kinds of mustard-seed are much used internally. (86) *Raskápur* (*Hydrargyrum chloridum*), impure proto-chloride of mercury. A laxative. Used also in ointments. (87) *Raswat* (*Berberis Asiatica* and *B. aristata*), native of the mountainous countries north of Hindustán, including Nepál. Ten to thirty grains of extract are given as anti-periodic in fever. It has also a laxative tendency. (88) *Rendhi-ka-tel* (*Ricinus communis*), or castor oil. Used as a purgative. (89) *Resha khatmi* (*Sida alba*). The powdered root is given in dysentery, and as a refrigerant. (90) *Rewand chini*, a species of Rheum; a root like rhubarb, of an inferior kind. (91) *Rithá* (*Sapindus emarginatus* and *S. detergens*). The nut is used as a soap and as an expectorant in coughs. (92) *Rumi mastangi* (*Pistacia lentiscus*), or gum mastic, from Afghánistán. Used as a perfume and as an aphrodisiac. (93) *Sabun matt*, or fullers' earth. Used to check diarrhoea. (94) *Safaid ghangchi* (*Abrus precatorius*), a stimulant. The powdered root used as a substitute for liquorice. (95) *Ságu* (*Sagus lævis*), or sago, imported from Malacca and Sumatra. (96) *Sambal khar*, arsenious acid. Used in leprosy and to cure snake bites, in the form of ointments. (97) *Sang jurdhat*, or steatite. Used with cubebs as an astringent in gonorrhoea, and to heal wounds. (98) *Sanna makhi* (*Cassia senna*), a common purgative. (99) *Shatara* (*Fumaria parviflora*), dried plant used in infusion with *chiretta* as a tonic and febrifuge, with *káládáná* as an alterative. (100) *Sirká* (*Acidum aceticum*), vinegar made from the juices of the *Borassus flabelliformis*, and *Phoenix dactylifera* and *P. sylvestris*. A refrigerant. (101) *Sirkhist*, an exudation from *Alhagi desertorum*, *Tamarix mannifera*, and probably other plants. Imported from Arabia and Persia. Used as a laxative. (102) *Sisá*, or lead; the oxides given as aphrodisiacs. (103) *Shora*, nitrate of potash. (104) *Sohága* (borax), or bi-borate of soda. Used extensively externally; also given internally as a laxative. (105) *Somrdj* (*Vernonia anthelmintica*), anthelmintic and purgative. Used in snake cures. It kills pediculi. (106) *Saunf* (*Pimpinella anisum*), or aniseed. Imported. The root is used as carminative and deobstruent. (107) *Surma* (*Antimonii sulphuretum*), or black antimony, used as an ointment to strengthen the eyesight. (108)

Sirmá safaid, or carbonate of lime. Used in ophthalmia. (109) *Sawán makhl*, or iron pyrites. A refrigerant and tonic. (110) *Sál* (*Shorea robusta*). The resin is used externally in sores, and internally to cure hæmorrhage. (111) *Tálmakháná* (*Asteracantha longifolia*). The seeds in infusion form a tonic and diuretic. (112) *Tejpdát*, various species of *Laurus*; the leaves used as stimulant aromatics. (113) *Tisi* (*Linum usitatissimum*), a demulcent. (114) *Usara rewand* (*Garcinia cambogia*). Imported from the Madras Presidency and Malacca. The gum resin is used as a cathartic, in doses of a half-grain to five grains. (115) *Ushak* (*Dorema ammoniacum*), or gum ammonia. Imported from Persia. Used in coughs and applied externally; given in doses of half a grain to six grains. (116) *Zirá* (*Cuminum cyminum*), or carraway seeds. A carminative.

VACCINATION.—The progress of vaccination in Monghyr has been much slower and uncertain than in most Bengal Districts. This is due both to a greater amount of prejudice and conservatism existing amongst the people of Behar, and also to the Province having received less attention in this respect from Government. The following Report by the Civil Surgeon, written in 1868, describes the position of things previous to that date:—‘Vaccination is at present carried on by vaccinators, paid partly by Government, and partly by the Municipalities of Monghyr and Jamálpur. Until 1867, vaccination was confined to Monghyr and Jamálpur towns, with the surrounding villages. In that year the appointment of special vaccinators for the municipalities enabled me to send the Government vaccinators into the District. Their success, however, has been very small, and I now think that it would be better to concentrate the efforts of the men within a limit of six miles round Monghyr and Jamálpur. It is better that a circle of such importance should be thoroughly vaccinated, than that a few vaccinators should be sent into the District, vaccinating a child here and there, and competing on unequal terms with crowds of inoculators. While for the present confining the exertions of paid vaccinators within a limited area, inoculators should be encouraged to continue their operations as usual, vaccine lymph being substituted for small pox matter. Inoculation is universally practised, there being very few persons in the District who are not either inoculated or marked with small-pox. Of 726 prisoners admitted into Monghyr Jail during 1867, there were inoculated alone, 421; inoculated, and marked by small-pox, 35; marked by small-pox alone, 199; vaccinated, 38; without any

marks, 33. The comparatively large number of persons vaccinated is due to the neighbourhood of the European station of Jamálpur. The inoculators are beginning to doubt the legality of their proceedings, and would be glad to accept employment as vaccinators. Seventeen men are now in the District performing the old operation above the wrist with needles, but using vaccine lymph instead of small-pox matter. One of these informed me that the epidemic in Monghyr was, if not originated, at least intensified by the action of the inoculators, and that he himself was so frightened at the mortality consequent on the operation that he gave up its performance.'

The following further information is abstracted from the Report for 1874 :—'The Municipalities of Monghyr and Jamálpur employed four vaccinators, who were paid £1 each during the working season, and 10s. during the recess. Two vaccinators were also entertained by the Darbhanga Ráj on the Kharakpur estates. The Government grant of £12 was distributed among 134 instructed inoculators. They had no defined areas, but worked where they expected most success. The operations within municipal limits were inspected by the Civil Surgeon and his assistant. Great difficulty was experienced in starting the work, owing to the repeated failure of lymph and crusts. The numbers vaccinated were—by Monghyr and Jamálpur vaccinators, 1259; Kharakpur vaccinators, 439; the hospital assistants of Jamuí and Begu Sarái, 634 and 27 respectively; 134 converted inoculators, 12,964. Vaccination does not find much favour among the higher-class natives, and the Márwáris are opposed to both inoculation and vaccination. Inoculation is said to be very common in the town and all over the District. Now that the Act prohibiting it has been extended to Monghyr and Jamálpur, inoculators will not be able to carry on their practice in those towns. With the exception of the municipalities already mentioned, and the two vaccinators paid by the Rájá of Darbhanga, there is no organized system of vaccination. All the work in the District is performed by trained inoculators, who get little or no encouragement in the way of remuneration from Government, and upon whom, as a necessary result, we have no check. All that Government allows on account of vaccination is £12 per annum, and it has hitherto been the custom to divide this sum among the deserving trained inoculators; but now that their number has so increased, the share they may become individually entitled to is scarcely worth claiming. The number of these men applying for *pardóns* (official orders

empowering them to operate) has considerably increased, being 134 against 92 last year. They are generally late in presenting themselves, and only work over a short period. They are furnished with an order to the police to be allowed to operate in certain circles. In the event of any of them being discovered practising inoculation, the police are requested to report the matter at once. Each man works among the inhabitants of a few villages in the vicinity of his own; and, in fact, this is the only way of getting the people to submit to the operation. These men are generally known to the villagers, and they repose confidence in them, which would not be accorded to strangers. I have no doubt that some of them may not be honest, and may practise inoculation on the sly, but many of them do good work. The returns show an increase in the operations performed by them of 12,961 against 12,531.

The tabular statement on the next page, showing the number of persons vaccinated during the seventeen years from 1858 to 1874, has been furnished to me by the Civil Surgeon. It will be observed that operations have been discontinued entirely of late years during the hot weather and rains. They were stated to be accompanied by considerable mortality amongst children.

FAIRS are very few in the District of Monghyr, being confined to the vicinity of the headquarters town. On the north of the Ganges none are held, trade transactions being entirely carried on in the large *bāzārs* and markets. The report of the civil surgeon in 1868 on this subject gives the following information:—‘Fairs are held in the neighbourhood of Monghyr, though not within the limits of the municipality. At the Sitākund hot springs, about four miles from Monghyr, fairs are held in November, January, and March. The average number attending them is 12,000. They only last for a day or two, and no outbreaks of disease seem to have occurred at them. At Rīshakund hot spring, about ten miles south of Monghyr, a fair is held once in three years. It is of no great importance, there being seldom more than 2000 people present. Although not strictly coming under the head of fairs, an assemblage of the people, which takes place annually towards the end of April, may be mentioned here. Thirty thousand cultivators are called together at that time from all parts of the District to deliver up their opium to the Government agents, and to receive the balance of cash due to them. As this is the only occasion they have of leaving their own

[Sentence continued on page 208.]

STATEMENT SHOWING THE NUMBER OF PERSONS VACCINATED IN THE DISTRICT OF MONGHYR FROM THE
YEAR 1858 TO 1874.

Months.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	Total.
January.	116	90	98	78	101	78	52	55	57	199	149	445	229	329	411	540	477	3,504
February.	208	96	81	86	99	85	72	106	71	272	241	954	236	265	129	437	413	3,851
March.	116	98	58	64	78	57	81	62	56	316	184	909	145	171	85	113	247	2,840
April.	84	106	44	51	57	56	61	36	52	111	115	50	7220	9,502	9,797	11,691	13,964	52,987
May.	94	92	..	..	49	26	50	..	..	..	..	..	..	..	..	..	..	311
June.	101	92	..	..	26	..	..	..	..	..	..	..	..	..	..	..	..	219
July.	81	109	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	190
August.	88	93	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	181
September.	107	75	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	182
October.	94	72	..	..	..	..	..	..	26	..	..	8	..	..	..	..	..	200
November.	86	76	31	23	28	22	22	14	35	60	62	77	44	32	8	96	48	764
December.	77	93	42	68	48	98	40	41	110	245	164	190	259	158	242	455	140	2,410
Total.	1252	1092	354	370	486	562	398	314	407	1203	915	2633	8133	10,457	10,662	13,332	15,282	67,629

Sentence continued from page 206.]

part of the District, they take advantage of the opportunity to purchase cloth, brass, and earthen vessels, etc., and many hundreds of tradesmen attend in order to supply their wants. Formerly they were all summoned for the first day of the opium weighing, and for about a fortnight remained crowded together within a very small compass. Outbreaks of disease were therefore common, and in 1863 cholera caused great destruction of life. Under the arrangements made by the present Sub-deputy Opium Agent, only that number of cultivators are summoned for each day whose opium can be weighed and to whom the money due can be paid within the working hours of the day. The men arrive at earliest on the previous evening, and continue to arrive all night. During the following day the opium is taken, and the money paid, and by sunset all are free to return to their homes. As a rule, however, the evening is spent in making purchases, and on the following morning they depart. The number of men present at any one time is therefore reduced to a minimum, and the risk of disease and contagion proportionally lessened.'

CHARITABLE DISPENSARIES. — There are four dispensaries in Monghyr District, — two maintained at the headquarters station and at Begú Saráí, and two branches of the former at Kharakpur and Jamdí. In 1873 the total number of in-door patients treated was 485, and out-door 11,882; grand total, 12,367, or a percentage of '68 on the whole population.

THE MONGHYR DISPENSARY was founded on the 1st March 1846. It is located in a fine masonry building on the east of the fort, in an open, well-ventilated situation; while, at the same time, it is sufficiently near to the principal *bádars* of the town, in which it has two sub-branches. It is in charge of a native assistant surgeon, under the immediate supervision of the Civil Surgeon of the station. If it had not landed property yielding a considerable monthly revenue, the institution must have collapsed long ago, from the sheer want of the necessary funds to carry it on. The native subscriptions for the past year (1873) amounted to only £16. This state of things was represented to the Municipal Committee, and that body liberally granted an extra annual allowance of £30, which, with a previous subscription, made their support equal to £80 per annum. The income of the dispensary during the year 1873 was £705. 6s. 11½d., of which £237. 2s. 9d. was the balance from the previous year; £119. 14s. 6d. the salary of the establishment contributed by

Government; £32, 17s. 1½d. came from local funds; £43, 13s. 2d. was the interest on vested funds; £15 the subscription of Europeans; £16 that of natives; £240, 19s. 5d. the rent of shops and houses, the property of the dispensary. The expenditure of the year was £688, 4s. 3½d.; leaving a balance in hand of £17, 2s. 8d. The items were—£217, 11s. 8d. for the salary of medical subordinates; £90, 2s. 5d. for servants' wages; £35, 7s. 5d. the cost of *bādr* medicines; £42, 16s. 10½d. the price of European medicines locally purchased; £86, 18s. 2d. for dieting the sick; £2, 11s. 6d. for wines and spirits; £140, 14s. 0d. for repairs and construction of buildings and house rent; and £74, 13s. 9d. for miscellaneous expenses for clothing, furniture, burials, etc. In 1872 there were 254 indoor patients against 365 in 1873, and 6210 outdoor patients against 7298. The female hospital was finished in July 1872, and is a very fair building for the sum expended,—£117, 10s. 0d. It answers its purpose very well; but will cost a good deal in annual repairs, being built of wood and bamboos, and not of brick or stone. There is accommodation for 8 females, and it is generally fairly well filled. Very small results from the teaching of midwifery may be expected, except in the case of the poorest and outcast classes. The Civil Surgeon writes: 'I have tried to get a respectable woman to learn practical midwifery, but in this District it seems a hopeless task.'

BROU SARAI DISPENSARY was established on 1st September 1872, and is almost entirely supported by European planters. The attendance has considerably increased, being 71 outdoor patients in 1873 against none in 1872, and 1266 indoor patients in 1873 against 1055 in 1872. The income of the dispensary in 1873 was £265, 16s. 6½d., including a balance of £29, 11s. 5½d. from the previous year. It was thus made up:—Contribution from Government, £65, 13s. 0½d.; interest on invested funds, £9; European donations and subscriptions, £127; native donations and subscriptions, £34, 12s. 0d. The expenditure of the year was £231, 12s. 11½d., leaving a balance in hand of £34, 3s. 7½d.; the items were—salary of medical subordinates, £134, 3s. 11½d.; servants' wages, £37, 8s. 4½d.; miscellaneous expenditure for clothing, furniture, burials, etc., £44, 16s. 5½d.

KHARAKPUR BRANCH DISPENSARY was established in May 1871, and is entirely supported by the Rājā of Darbhāngah. Although there is no lack of funds, there was much difficulty in getting proper

accommodation, the dispensary being for a long time located in an old house in the heart of the *bázár*. A new building has lately been constructed, which during the famine was used as a rice store; but it has now (1875) been taken possession of by its legitimate occupants. The expenditure of the institution in 1873 amounted to £161, 1s. 3d. In the same year there were 42 indoor patients, against 32 in 1872, and 2303 outdoor patients against 1550. The Deputy Surgeon-General inspected this dispensary on the 10th November, and reports that the institution is evidently highly popular. He arrived at daybreak, and saw the frontage opposite the dispensary building soon filled with applicants for relief.

JAMUI BRANCH DISPENSARY was established in April 1867. A new building has been erected here also, and the institution is now described as a promising one. In 1873 its income was £133, 9s. od., of which £119, 12s. 7½d. was the balance from the previous year. The expenditure was £11, 12s. 6½d., leaving a balance in hand of £121, 16s. 5½d.

In 1874 the Civil Surgeon made a return of the number of patients who had been treated at each of the dispensaries in each of the five years from 1869 to 1873. At the Monghyr dispensary in 1869, 5019 patients came under treatment; in 1870, 5308; in 1871, 6434; in 1872, 6464; in 1873, 7663. total patients treated, 30,888. In Begu Sarái dispensary, in 1872, 1053 patients were treated; in 1873, 1273: total, 2290 patients. In Jamui dispensary, in 1870, 803 patients were treated; in 1871, 637; in 1872, 837; in 1873, 988: total patients, 3265. In Kharakpur dispensary, in 1871, 1396 patients were treated; in 1872, 1569; in 1873, 2269: total patients, 5234. Grand total of patients treated, 41,677.

CONSERVANCY AND SANITATION. —The only portions of the District in which conservancy and sanitation are at all attended to are the small areas included within the municipal limits of Monghyr and Jamálpur; and it is only with regard to the former that reports on these subjects have been drawn up. In the rest of the District no means are taken to improve the public health, by means of increased cleanliness or other sanitary measures. Even in the municipalities, the condition of the minor public thoroughfares and all private premises was, until lately, very unsatisfactory. In 1868 the Civil Surgeon wrote: 'The main streets of Monghyr are kept clean, but otherwise the state of the town is much the same as it must ever have been. As soon as you leave these main streets,

you come across heaps of putrefying filth and large holes full of foetid fluids. Drainage is imperfect, partly because it is incomplete, partly because the levels of the drains are not correct. The rain water finds for itself a path in the centre of the roads. At intervals, when the rain is very heavy, it finds its way into a drain, which may thus be cleared out. There are in several parts of the town hollows of great extent and of irregular shape and depth. These have not been constructed originally as tanks, but have arisen from the earth having been gradually removed for building the huts in the immediate neighbourhood, or for brick making. The description of one of these will suffice for all. It lies in an open space to the east of the town, completely surrounded by houses. It is of irregular shape, about 100 yards in length and breadth, and is partially filled with black, muddy water, the accumulation of all the surface drainage in the neighbourhood. Numbers of people are bathing and washing clothes, while the portion of the hollow not now under water is being used as a public necessary. Later in the season the water dries up, and only a foetid black ooze is left. In the hot weather it is perfectly dry.'

Within the last few years, however, there has been a great advance made. The refuse and sweepings of the streets are now carefully removed beyond the municipal boundaries, for which purposes six bullock carts and fourteen scavengers are employed. Latrines have increased in number from two in 1868 to fourteen in 1874, in which year fifty-one sweepers were employed in removing the excreta, which are ultimately deposited on the municipal farm. The report of the Civil Surgeon for 1874 describes in full the present conservancy arrangements:—'The dry-earth system is carried out and answers very well. There is no regular or connected system of drainage, but this subject is under discussion. An attempt is being made, in accordance with the suggestion of the Sanitary Commissioner of Bengal, to remove the coverings over the old deep drains, which exist in the municipal streets. These drains in their present state are so closed in as to be almost useless for the purpose originally intended, and, in fact, are converted into so many cess-pits. In addition, the public thoroughfare has been encroached upon, as the platform of the drain is in most instances a continuation of the floor of the house, and in order to protect this addition the roof of the house has been proportionally projected into the street. This has been going on

so long and insidiously, that there may be great opposition offered to the proposed improvement. It was resolved by a special committee, appointed to consider the best kind of drainage for the town, that open saucer drains would answer best.

'Monghyr has an abundant supply of water from the Ganges and numerous wells. Many of the wells have been improved during the past year, by the addition of masonry platforms and drains to let off the surplus water. Slaughter-houses for sheep and cattle have been erected in the *bāsar*, and are kept under supervision. The offal is removed to the municipal farm. Cremation of the dead is conducted at a place on the bank of the river some distance below the station. Some time ago a special committee was appointed to inspect and report upon the Muhammadan burial-grounds, public and private. All the public and many of the private cemeteries were found in a most objectionable condition. The public graveyards are numerous, and many of them are of large size. They are utterly neglected and overrun with jungle. Many of the private burial-grounds are in the midst of dwellings or close to wells, and as more space for graves becomes necessary, the people seem to be under the impression that they can take in land and bury where they like. The special committee unanimously agreed that all public and the most objectionable of the private cemeteries should be closed, and that a suitable piece of land should be obtained outside the town for the site of a public Muhammadan burial-ground.'

CATTLE DISEASE.—I give below short descriptions of the principal diseases to which cattle are subject in Monghyr District. They are neither full nor scientific, but the best that I can obtain with regard to a subject which has been little studied in Behar. *Guth*, or small-pox, is often prevalent; it reveals itself by the cattle refusing to eat, by swelling of the stomach and throat, drooping of the ears, and a dryness and cracking of the corners of the eyes; at the same time they pass water freely, the body is very hot, and the hair drops off, there is much salivation, and diarrhoea of more or less severity. In *thukkha bhājd*, or foot-and-mouth disease, sores break out on the legs and on the mouth and tongue. The remedies are partly directed by a kind of empiricism, and partly by superstition. The legs are tied with catgut, tortoise shell is buried in the cow-shed, the animal is kept in dry quarters, and the flowers of the *sikhi* grass and tobacco leaves mixed with dried

cow dung are applied to the sores. *Dharká* is shown by local swellings of the body, often of the joints. Rubbing the swollen parts with the hand is said to give relief. *Mathá* is summarily described to me as a disease in which the eyes water and the animal refuses its food. Yellow earth mixed with milk is administered; hot mustard-seed oil, or sometimes hot milk, is rubbed on the top of the head. In *arheya* the tongue becomes foul, the animal falls lame, and is said to remain in this state for two and a half days. The remedy is characteristic. The animal is washed with an infusion of two and a half leaves of the *kántál* or jack-fruit tree, and two and a half flying bugs, a species of lady-bird (*Coccinella*), in two and a half *pudds* or small measures of water. A little *simul* cotton is given it to eat. *Chamár gutt* is a dysentery often attended by hæmorrhage, and is much dreaded, as no remedy is known. Swelling and inflammation of parts of the compound stomach of ruminant cattle are often caused by over-feeding; chewing the cud and eating are stopped for a time, and breathing is difficult. Turmeric flower and rice bran are given in small quantities; catechu, *ajudin* (*Ptychotis*), and lime water are also administered.

There are no notices of cattle disease in the records, but, so far as I can ascertain, there was a severe epidemic of small-pox about eight years ago, which was believed to have been imported from the Nepál Taráí. In 1864 a disease called *harnd* was prevalent near Tegrá. In Shaikhpurá it was called *dharká*. Sores were numerous in the body of the animal, and cautery of the affected part was the ordinary remedy; a healing ointment of mustard-seed oil and vermilion being afterwards applied. At the same time a mixture of pepper, the unripe tuber of *Arum campanulatum*, and mustard-seed oil was administered internally.

THE GEOLOGICAL FORMATION of the District has been described to me in a note by Mr. H. B. Medlicott:—‘A large portion of Monghyr, exclusive of the alluvial area, is occupied by hard rocks. They all belong to the very oldest formations—crystalline metamorphic, and semi or sub-metamorphic. The former are a part of what is currently spoken of as the Bengal gneiss; the latter belong to the quartzite and schist series of Behar. The whole is a segment of a great geographical and geological feature, stretching more than half across the peninsula in a south-south-west direction; a zone of schists fringing a great spread of gneiss. Monghyr town stands at the north-eastern

extremity of the Kharakpur hills, which are formed of sub-metamorphic rocks, and are connected through the hills of Gidhaur, Shaikhpurá, Rájgir, and Gayá, with similar rocks in the Són and Narbadá valleys. Throughout this entire length, gneissic rocks occur to the south of these semi-metamorphic formations. The detailed structure of these rocks has received as yet but very partial attention; and without entering upon scientific disquisitions, it would not be possible to give even an abstract of what has been conjectured regarding the relations of these obscure formations. It must suffice to indicate their leading features. The Chakál parganá in the south of the District is altogether formed of the gneiss of the upland area, commonly known as the Hazáribágh plateau. This boundary of the upland seems to be connected with the occurrence of certain very refractory quartzites in the gneiss, which is approximately on the run of the line of junction between the two classes of rock, as already mentioned. A geological separation from the main body of the gneiss may yet be worked out for these rocks, but at present no distinction can be drawn between the gneiss of the upland and that occupying the low ground from the foot of the Gháts to the southern base of the Kharakpur hills, and stretching for some way along them on the east. Similar rocks are met with west of the Keul, rising well above the plain, north of the Gidhaur hills. North of the Kharakpur hills also crystalline rocks are represented by a boss of granite at the village of Urdín, five miles east of Lakhísarál. Many varieties of rock are at present included in this gneissic series—from massive porphyritic granitoid gneiss, through finely foliated gneiss, quartzose, micaceous hornblende, to fine mica-schists and hornblende rock. Limestone occurs to a very subordinate extent. Thus it would appear that the several detached groups of hills of the semi-metamorphic series are not only isolated by the alluvium, but also by the supporting gneissic rocks, which probably underlie most of the plain area in this District.

The principal of the hill groups in Monghyr are those of Kharakpur, Gidhaur, and Shaikhpurá, with a few small detached hills, such as those east and south of Lakhísarál. A small portion of these rocks in the Bhiaura and Mahábar hills, adjoining the Gidhaur hills on the south-west, has been described in some detail (*Records, Geological Survey of India*, vol. vii. p. 32, 1874), from which it would appear that the normal sequence of these deposits is—quartzite, fine grained and several hundred feet thick; slate or schist, according

to position, often ferruginous, producing rusty slates and garnetiferous or hornblendic schists, a thin limestone occurs very rarely; and a bottom zone of very variable character, often altogether of fine quartzite, but frequently with schistose bands. A good example of the middle band, in its less altered condition of rusty slates, is seen in Birhua hill east of Lakhisarál. The bottom member of the series would seem to be the one principally developed in Monghyr. There also occur in this District, underneath all the quartzites, some peculiar conglomeratic beds with a bulky pseudogranitic matrix. They are well seen in the little hills south of Lakhisarál. Some fairly good slates have been quarried in these rocks near Darárá. A peculiar cellular quartzite, a very favourite stone for hand-mills, often occurs in the basal beds of the series. There are extensive old quarries of this stone on Lakhisarál hills and elsewhere, which are mentioned by Dr. Buchanan Hamilton.

‘Several forms of the rock so well known in India as laterite occur in Monghyr. The detrital variety containing mixed rock debris is found in the valleys of the Kharakpur hills. That form of laterite produced by weathering of the outcrop of ferruginous rocks, and in which traces of the original rock texture can generally be observed, is also met with. There is, besides, a good instance of the massive high-level rock-laterite, the origin of which is so difficult to explain. It forms the summit of Máirá, the highest point of the Kharakpur hills. The rock next below it is no doubt a ferruginous schist; but it is highly inclined, whereas the laterite imparts to the summit the form of a capping of horizontal rock. So far, too, as one can observe on the surface, there is no trace in the laterite of the texture of the underlying rock. It is exactly like that found on totally different formations on the highlands of Chutiá Nágpur and the Dakhin—a base of fine earth, variously warped and stained by segregation of iron oxide.’

STATISTICAL ACCOUNT
OF THE
DISTRICT OF PURNIAH.

STATISTICAL ACCOUNT

OF THE

DISTRICT OF PURNIAH.¹

THE DISTRICT OF PURNIAH, which forms the north-eastern portion of the Bhágalpur Division, is situated between $25^{\circ} 15'$ and $26^{\circ} 35'$ north latitude, and between $87^{\circ} 02'$ and $88^{\circ} 35'$ east longitude. It contains a population of 1,714,595 souls, as ascertained by the Census of 1872; and covers a total area, as returned by the Boundary-Commissioner in 1875, of 4957 square miles. Purniah town, the principal Civil Station, and also the most populous place in the District, is situated on the left bank of the river Saurá, in $25^{\circ} 48'$ north latitude and $87^{\circ} 35'$ east longitude.

BOUNDARIES.—The District of Purniah is bounded on the north by the State of Nepál, and by Dárljling District; on the east by the Districts of Jalpáiguri, Dinájpur, and Maldah; on the south by the river Ganges, which separates it from the Districts of Bhágalpur and the Santál Parganá; and on the west by the

¹ The principal sources from which this Statistical Account has been compiled are:—(1) Answers to the five series of questions furnished by the District Officers. (2) Dr. Buchanan Hamilton's *MS. Statistical Account of Purniah* (1811). (3) Bengal Census Report, 1872, with subsequent District Compilation by Mr. C. F. Magrath, C.S. (4) Special Report on the Land Tenures of the District by Bábu Rajánináth Chattarjī. (5) Sir R. Temple's *Minute on the Famine of 1874*. (6) Annual Reports of the Inspector-General of Jails, particularly that for 1872. (7) Report of the Inspector-General of Jails for 1872, with special Jail Statistics for 1857-58, 1860-61, and 1870. (8) Postal Statistics for 1861-62, 1865-66, and 1870-71, furnished by the Director-General of Post Offices. (9) Medical Report, furnished by the Civil Surgeon of the District. (10) Statement of Areas, Latitudes and Longitudes, etc., by the Surveyor-General of India. (11) *The Statistical Reporter*, Calcutta, 1875, 1876.

pargands of Náráidgar, Nisankpur Kúrá, and Chháí, in the District of Bhágalpur.

JURISDICTIONS.—I have not been able to obtain trustworthy information regarding changes in the limits of the Purniah jurisdiction, dating from an earlier period than 1813; but it would seem that previous to the beginning of the present century, there was some alteration of the frontier line between this District and Dinájpur. In March 1813, the *thánds* or police divisions of Síbganj, Káliáchak, Bholahát, and Gárgáribá were transferred from the magisterial jurisdiction of Purniah, and, together with portions of Dinájpur and Rájsháhi, formed into the new District of Maldah, which was placed in charge of an officer exercising the powers of a Joint-Magistrate and Deputy-Collector. After this period, no considerable change was made in the size of the District till the year 1869, when, by a Notification dated the 2d June, the *pargands* of Haráwat and Dhaphar, now included in the police division of Pratápganj, were transferred to Bhágalpur. The former *pargand* consisted of 134 villages, and the latter of 137, and together they covered an area of 280,293 acres, or 437·95 square miles. At the same time, 13 villages situated in *pargand* Chak Diláwarí, 4 in Dharpur, and 1 in Garhí, were also transferred to Bhágalpur. These occupied an area of 30,393 acres, or 47·49 square miles. Later on in the same year, 50 villages belonging to *pargand* Badaur, 132 belonging to Hatandá, 101 to Máhínagar, 23 to Kásimpur, 14 to Kharba, 41 to Diláwarpur, 75 to Kánkjol, 3 to Akbarpur, 2 to Maldawár, 1 to Kholrá, and 22 to Samalpur, covering a total area of 174,407 acres, or 272·51 square miles, were transferred to Maldah. At the same time, 64 villages belonging to *pargand* Sujáinagar, 11 to Akbarpur, and 2 to Kánkjol, occupying an area of 32,634 acres, or 50·99 square miles, were transferred from Maldah to Purniah. A few petty interchanges were also made between Dinájpur and Purniah, but these only involved a total area of a few hundred acres.

The jurisdictions of the Civil, Magisterial, and Sessional Courts of Purniah District are all conterminous.

HISTORY OF THE DISTRICT.—The authentic history of Purniah commences with Musalmán times. It is impossible to unravel the tangled web of Hindu and aboriginal myths belonging to an earlier period. They do not form even a semblance of a connected narrative. We can only observe that the fundamental ideas on

which they are based, and the personages with whom they deal, are derived from the Kiránti peoples who lived to the east and north of the Kúsi and Kárátoyá. The stories relate, for the most part, the struggles and conquests of Kirat, Kichak, and other petty chiefs, who are now represented to have been Ráís of pure Rájput descent, but who were really of Koch origin. The earliest of the Hindu traditions refers to the Pandava war; but there are many other legends, evidently borrowed from the western peoples, who ruled in Mithila or Northern Behar, west of the Kúsi, for many centuries before the Christian era.

Immediately before the Muhammadan invasion of Bakhtiyár Khiljí, Southern Purniah is said to have constituted a portion of the kingdom of Lakshman II., whose capital was at Nadiyá. The Bír Bándh, now in Bhágalpur, is represented to have been erected by this monarch to oppose Musalmán incursions. This is a very improbable explanation of the origin of this fortification, as all conquerors from the west have followed the road that runs along the southern bank of the Ganges, and debouches on the plain of Bengal to the south of Rájmahál. That a large part of Purniah became an appanage of the Musalmán sovereigns of Bengal during the thirteenth century is certain; but until the middle of the seventeenth century, the governorship of this District does not seem to have become the valuable prize it was afterwards considered. During the intermediate centuries it was regarded as an outlying military province, whose revenues were sufficiently burdened in protecting itself against the incursions of the northern and eastern tribes. In the war between Sher Sháh and Humáyun it supplied the latter with some rough levies, but these were not nearly so numerous as might have been expected from the size of the District. So little is known of Purniah during this long period, that not even the names of its *faujddárs* or military governors have been recorded. About the latter quarter of the seventeenth century, Ostwál Khán was appointed *faujddár*, with the title of Nawáb, and united in his person the command of the frontier army and the fiscal duties of *ámil* or Superintendent of the Revenues. He was succeeded by Abdúlla Khán, who was vested with similar powers. About A.D. 1680, Asfandiyár Khán became Nawáb of Purniah, and held the office for twelve years. He was succeeded by Isábhaniyár Khán, who ruled until his death in 1722, when Sáfí Khán, the greatest of the governors of Purniah, was appointed to what had now become an office of great emolument and

dignity. He was the grandson of Amír Khán, and considered himself of such high lineage that he refused in marriage the hand of Nafissa Begam, the grand-daughter of the Bráhmaṇ convert Murshid Kulí Khán, then Nawáb of the Subahdári of Bengal. At this time Purniah was bounded on the west by the river Kúsi, which seems to have passed under the town of Purniah and thence due south, falling into the Ganges somewhere near the present village of Kára-golá. The northern boundary was distant from the Headquarters town by only a few miles. The present market village of Jalálgarh was then a frontier fort, estimates for the fortifying and garrisoning of which, dating from about this period, are still in existence. From Jalálgarh the boundary ran eastward, passing a little north of the confluence of the Mahánandá and Kankái, to the most southern point, where the present *parganá* of Surjyápur touches the District of Dinájpur.

Immediately after his appointment, Sáif Khán began a series of encroachments on the neighbouring State of Nepál, which he carried on until he had advanced his frontier to the Taráí. Refractory conduct on the part of Bír Sháh, the *samindár* of Bírnapur, induced him to cross the Kúsi in the year A.D. 1731. After this exploit, in which he was entirely successful, the four *parganá*s of Dhapar, Náthpur, Dharpur, and Goráí, formerly attached to Sarkár Monghyr, were transferred to the Purniah jurisdiction. Mr. Grant, in his Analysis of the Revenues of Bengal, observes that this transfer was never recorded in the revenue-roll of Bengal, and that the necessary reduction from the revenues of Behar was only roughly made under the name of Dharpur. This revenue deduction, also, amounted to only £4000, whilst the original assessment of these *parganá*s was more than £35,000. The financial result of Sáif Khán's management was, that the actual *jaujdári* receipts were increased from £90,000 to £210,000, whilst no addition was made to the revenue previously payable to the Murshidábád Nawáb. Sáif Khán seems to have ruled with much splendour. He maintained intimate relations with Murshid Kulí Khán, who is said to have conferred on him the title, which he afterwards officially assumed, of Zan Bakhsh, from his habit of rewarding his friends and companions by the dubious favour of conferring on them his own cast off mistresses.

After the death of Sáif Khán, the Government was bestowed in rapid succession on Muhammad Abed and Bahádur Khán. The

latter was removed to make way for Saulat Jang, better known as Sáyyid Ahmad, the son-in-law of Alí Vardí Khán. His relationship to the Nawáb seems to have been the chief reason of his appointment to the Purniah governorship. Although a good soldier, he had been unsuccessful as an administrator in the Province of Orissa, where the people had risen against him in consequence of his tyrannical conduct towards some Uriyá ladies. His government of Purniah, however, appears to have been prudent and just. He died in A.D. 1756, and his memory is still preserved and respected. He was succeeded by his only son, Shaukat Jang, whose character is represented to have been as bad as that of his notorious cousin, Siráj-ud-Daulá. Both young men were equally successful in giving offence to all the old servants and officers of their fathers, and by their perverse conduct entirely alienated the affections of the people. The author of the *Sair-ul-Mutákhharin* writes, that it had been manifestly decreed that the guilty race of Alí Vardí Khán should be deprived of their vast dominions, which had cost so much crime and labour to build up; and that Providence had, with this object, consigned the government to the hands of two young men, equally vain, cruel, and incapable of government.

For a long period before his death, Alí Vardí Khán had been suffering from an acute dropsy, and his demise had been expected years before it occurred. Sáyyid Ahmad, calculating on this contingency, had devoted the resources of his wealthy province to equipping a large army, with which he hoped to wrest the sovereign power from any other of the descendants of the Nawáb. These pretensions, as well as the means by which he sought to enforce them, he handed down undiminished to his successor. To pacify, and, if possible, buy off this formidable claimant to the throne, which he had destined for Siráj-ud-Daulá, Alí Vardí Khán bestowed the whole Purniah jurisdiction in perpetual *jágír*, or revenue-free grant, on Shaukat Jang. He seems to have so far succeeded in his object, that the succession of Siráj-ud-Daulá was unopposed. The tyranny of the new ruler, however, soon supplied an occasion for a rupture. The principal ministers at Murshidábád were displaced to make room for young favourites. Chief in influence and ability amongst the displaced officials was Mír Jafar Khán, the *Bakhsh* or Paymaster-General of the Nawábí forces. He betook himself, after his disgrace, to the court of Shaukat Jang, and

whilst he described the weakness of his rival, urged him to seize the *masnad* of Bengal. In order, however, to secure beforehand an excuse for hostile action, Shaukat Jang obtained from Ghází-ud-dín, the Wazír of Alamgír II., Emperor of Dehli, a *farmán* or commission, bestowing on him the *súbahdárí* of the Lower Provinces. These transactions came to the knowledge of Siráj-ud-Daulá, who resolved to anticipate the attack. He collected an army, and had advanced as far as Rájmahál with the intention of invading Purniah, when the complications with the English East India Company induced him to turn back and attack Calcutta, an operation which resulted in the tragedy of the Black Hole. On his return to Murshidábád, he determined to test the allegiance of Shaukat Jang by appointing a Hindu courtier, named Rás Behárá, to the *zamindárí* of Birmagar. The Purniah Nawáb passionately resented this interference with his authority, and ordered the bearer of the message to be publicly flogged. He followed this up by causing the Dehli *farmán* to be openly proclaimed, and wrote a letter to Siráj-ud-Daulá, bidding him to withdraw from Murshidábád to any of the eastern Districts, which, in case of his obedience, would be conferred on him for his maintenance. The letter concluded with an injunction to answer quickly, as the Nawáb of Purniah awaited his reply with his foot in the stirrup. The Súbahdár's answer was to order his army to advance in two divisions, one of which, under his own command, marched up the right bank of the Ganges, whilst the other, under Rájá Mohan Lál, followed the left bank of that river. The conflict that ensued took place at Báldiábárá, near Nawábganj, in *parganá* Kánkjol. The account given of it in the *Sair-ul-Mutákhharín* is one of the best descriptions of a battle-scene to be found in the Musalmán historians. The Purniah army had taken up its position behind a chain of deep morasses, over which there was only one practicable causeway. The advantages of this position were sacrificed by the ignorant rashness of Shaukat Jang. Whilst awaiting his arrival, his generals had hesitated to arrange the order of the coming battle. When he did arrive on the field, he morosely refused to issue any more explicit orders to the officers, who sought instructions from him, than vaguely to direct them to return to their positions and there await his commands. When an old Afghán officer drew his attention to the utter disorder that prevailed, and described to him the orderly battalions that Nizám-ul-mulk led into battle, his only answer was to

abuse the great commander of the Dakhin, and to utter the vain boast that he wanted no advice, as he had already fought three hundred battles. His army was strong in cavalry, which was under the command of a well-known leader, named Hazárl Lál. His artillery, however, was weak ; and the officer in charge of it, Syám Sundar, pressed forward with more courage than wisdom to reply to the enemy's cannonade. Seeing this, Shaukat Jang sent a message to his cavalry commander taunting him on his inactivity. This officer pointed out that no horse could attempt to cross the marsh and live. Shaukat Jang replied by contemptuously comparing the conduct of his Musalmán horsemen with the courage of the Hindu scribe, as he called Syám Sundar, who was probably a Káyasth. The cavalry, thus taunted, determined to cross the morass at all hazards, and soon were struggling through its thick mud, whilst the artillery of Siráj-ud-Daulá, from the other side, poured volley after volley into them. Immediately after giving his second message, Shaukat Jang took his mid-day draught of wine, and retired, as was his wont, to his tent and his harem. Meanwhile, the battle had gone against him in all directions. His artillery had been silenced and his cavalry cut to pieces, without inflicting much injury on the enemy. At this critical time, some of his officers came to him, and, drunk and enervated as he was, placed him on an elephant with a servant to support him. He had only advanced as far as the middle of the morass, when a musket ball struck him in the forehead and killed him. This occurrence took place in the presence of the whole army, who, seeing that they had no longer anything to fight for, fled in disorder to the town of Purniah, which was entered by the victors two days after. Shaukat Jang governed only for nine months. He was followed in quick succession by Rál Negráj Khán, Házir Alí Khán, Kádr Husáin Khán, Allah Kulí Khán, Sher Alí Khán, Sipáhdár Jang, Rájá Suchet Rái, Razí-ud-dín Muhammad Khán, and Muhammad Alí Khán. This last governor was superseded about A.D. 1770 by Mr. Ducarrel, the first English official with the title of Superintendent.

PHYSICAL ASPECT OF THE COUNTRY.—Purniah District forms a north-western extension of the great deltaic plain of Bengal Proper. With the exception of Chhotá Pahár, in Manihárl, a small hill of nodular limestone, and a few tracts of undulating country on the borders of Nepál, the whole presents an almost dead level. As regards quality of soil, it may be divided into two main portions of

nearly equal size. To the east of a line running from the point where the Panár enters the District to the Headquarters town of Purniah, and then trending southward and eastward through Sáifganj to Manihárl, the land is composed of a rich, loamy soil of alluvial deposit. To the west of this line, the country, which seems to have been formerly of the same nature as that just described, is now thickly overlaid with sand deposited by the Kúsi in the course of its westward movements. The former tract is peculiarly rich in rivers and natural canals, by means of which nearly every part of it is accessible during the rainy season. Large marshes also exist, which do not completely dry up at any period of the year. Rice is almost the only staple of cultivation, except towards the north, in the Krishnaganj Subdivision, where jute occupies a considerable area. The country is destitute of anything that can be called forest, but much scrub jungle, in which the wild rose-tree predominates, is found in the neighbourhood of the more swampy tracts. In the western division, the most noticeable feature is the extent of country not under cultivation, which spreads out from the vicinity of the town of Purniah, chiefly to the north and west, in the form of radiating stretches of land, opening out occasionally into fine, grassy, prairie-like plains. These afford sustenance everywhere to great herds of cattle, and towards the south, to numerous flocks of sheep. Along the Ganges there is little vegetation; but the newly-formed Kúsi *chars*, or sandbanks, are covered with a dense and high jungle of coarse grass, forming the best covert in the District for wild animals. Villages are much rarer here than in the east of the District; and the huts which form these villages are smaller and much less comfortable than those to be found in Kadabá, Krishnaganj, and Amúr Kásbá. To the south of the Headquarters town, indigo occupies a considerable area; whilst on the north, tobacco is, next to rice, the chief article of produce.

THE RIVERS of Purniah District group themselves into three systems, all tributary to the Ganges. The following account of these water communications is derived from a return made by the Collector in 1871, and from a report drawn up by Mr. T. H. Wickes, C.E., during the progress of the famine relief operations of 1874, in connection with boat transport.

The river systems may be thus shown in one table:—

GANGES, . . .	{	Kúsi,	{	Nágar dhár.
			{	Mará Hiran.
			{	Rájmohan.
		Kálá Kúsi,		Saurá.
		Panár,	{	Bakrá.
			{	Parwán.
	{	Mahánandá,	{	Nágar.
				Pitanu.
				Dank.
				Kaukái.
			{	Ratuá.
			{	Mechi.
			{	Jamuná.
			{	Burgangi.
			{	Chengá.
			{	Balásan.

There are, besides, some minor streams falling into the Ganges between the mouths of the Kúsi and the Panár.

THE KUSI rises amongst the Nepál mountains, being formed by three principal hill torrents. Before it approaches English territory, its course is marked by numerous rapids. At the point where it enters Bhágalpur, in the north of *parganá* Dhaphar, it is a large river nearly a mile wide. At the time of the Revenue Survey, it passed through *parganá*s Dhaphar, Náthpur, Gorárl, and Dhampur, but it has now worked its way nearly to the western boundary of these *parganá*s. The Kúsi is remarkable for the rapidity of its stream, the dangerous and uncertain nature of its bed, and chiefly, for its constant westerly movement. Owing to these characteristics, its navigation is at all times of the year a matter of much difficulty. The channels of deep water are constantly changing, new ones being yearly opened up, and old ones choked by vast sandbanks. Mr. Wickes states, that if a boat strikes on one of these banks, it is liable to be at once turned broadside over by the velocity of the stream; or the current, eddying round and under it, cuts away the upper hard crust of sand, and it sinks into a quicksand beneath. The bed of the river is full of sunken trees or snags, but experienced boatmen can foretell this danger by changes in the appearance of

the surface. Owing to the great velocity of the current, boats have frequently to wait several days for a favourable wind to help them up particular reaches of the river. The present bed of the Kúśí is many miles distant from the channel shown on the maps. Boats proceeding up or down the river require to be preceded by a regular Kúśí pilot, who goes some distance in advance and selects the channel to be followed. The Kúśí is navigable all the year round for boats of 750 *mans*, or about 27 tons burden; and as far as the Nepál frontier for boats of 250 *mans*, or about 9 tons burden. Large boats take a much longer time than small ones to make their way up-stream, and they are more liable to risks from snags and quicksands.

According to the legend, this river is Kausikí, the daughter of Kúśik Rájá, King of Gádhlí. Although the daughter of a Kshattriya, she was the wife of a holy Bráhmaṇ, Múni; and on giving birth to a son, who preferred the warlike exploits of his mother's race to the sacred duties of his father, she was, at the prayer of a saint, changed into a river. Her brother, Viśwamitrá, is also famous in Hindu fable. Rejecting the worship of all inferior gods, such as Viśhnu and Siva, he devoted himself with such ardour to the service of Para Brahma, or the One and Eternal God, that he himself obtained some of the attributes of a creator. To him the world owes the existence of several kinds of grain; and he was about to create a new race of human beings, who were to live on trees, when, at the solicitation of the gods, he desisted, after he had formed only the head of the first man, the representative of which still remains in the form of the fruit of the cocoa-nut.

The three tributaries of the Kúśí, mentioned in the table on the preceding page, which formerly joined it on its right bank, have now nearly disappeared, their courses having been almost entirely obliterated by the westward movement of the main stream.

THE PANAR is formed in the Matiyárí police division, by the confluence of a number of hill streams which have risen in Nepál. Its course is first south-east through Sultánpur *parganá*, passing by Aráriyá, then through Háveli Purniah, about ten miles to the east of the Headquarters town, then southward through Kadbá and Hatandá to the Ganges. It is navigable for boats of 250 *mans*, or about 9 tons, in the neighbourhood of Purniah, and above that for boats of 100 *mans* (about 3½ tons) almost to the Nepál frontier. The current in the upper reaches of the river is very rapid.

Although at no point a large river, its course is second in length only to that of the Mahánandá.

THE BAKRA is a small and very rapid stream, rising in the Madhubaní *táluk* of the Murang, or lower Himálayan range, and uniting with the Panár at Rámpur, five miles north of Aráriyá. It carries scarcely any boat traffic, except such as may be conveyed in two or more dug-outs, fastened together to form a raft. A great deal of timber is also brought down the Bakrá from Nepál.

THE PARWAN or Katuá, another hill stream, is only in part a tributary of the Panár, into which river it falls not far from Ekambá at Raniyáni *ghát*. After this junction, it almost immediately breaks off from the Panár and divides itself into two branches, the larger of which runs eastward to the Mahánandá; and the smaller, after a circuitous course, re-unites with the Panár a few miles below Kadabá. Both these branches are navigable in the rains for boats of 250 *mans* (about 9 tons). There is a bridge on the Ganges and Dárjiling road at Báisi, over the branch which rejoins the Panár; boats cannot, however, always pass under the bridge, and through traffic has therefore to take the Panár route. Above Raniyáni *ghát* the Parwán is navigable as far as Púthia for *ekils* of 50 *mans*.

THE KALA KUSI, the most clearly marked of the old beds of the Kúsi, still preserves, to some extent, the appearance of a river. At the same time, it is so broken up by diverging, reuniting, and interlacing channels, that it is almost impossible to determine where it begins, or what is its course. It may, however, be considered to have its rise, under the name of the Kamlá, near the police centre of Rániganj, in the Subdivision of Aráriyá, whence it flows southward to the town of Purniah, where it receives its principal tributary, the Saurá, a river rising in some marshes to the west of Aráriyá. Below Purniah the Kálá Kúsi continues its course southward, often by several beds, and, passing near the indigo factories of Pírganj Jagannáthpur, Kolási, Manshái, falls into the Ganges to the south-east of the police station of Manihárl, nearly opposite Sáhibganj.

THE MAHANANDA rises in the lower mountains of Sikkim, to the south-east of Dárjiling. In its upper reaches it flows with a very rapid current, and is subject to heavy and sudden freshes. It enters Purniah District near Titályá, forming the eastern boundary of the District towards Jalpáiguri for eight miles north of that place, as far as the village of Phánsidewá. From Titályá it flows westward and

southward across the Káliáganj police division, after which it forms a boundary between Bahádurganj and Krishnaganj for about twelve miles, and then between the latter police division and Amúr Kásbá down almost to the confluence of the Kankái. It then passes eastward through Balrámpur to the southern boundary of the District towards Maldah, after which it bends eastward. Numerous important markets are held on or near its banks, of which the principal in Purniah District are:—Káliáganj, Haldibárl, Kharkharí, Krishnaganj, Dulálganj, and Barsol. It is navigable for boats of 1000 *mans*, or about 36½ tons, up to Barsol; for boats of 500 *mans* (18 tons) up to the junction of the Kankái, four miles above Díngraghát; for boats of 250 *mans* (or about 9 tons) to Kharkharí; and for boats of 100 *mans* (about 3½ tons) to Káliáganj. Above Káliáganj, the rapidity with which the river rises and falls, and the velocity of the current, combine to render navigation impossible.

The Mahánandá receives on its right bank (1) the Dánk, which rises in the District of Jalpaíguri, and, after receiving several minor streams, flows westward to Haldibárl, below which its course is always near to and often parallel with the Mahánandá, down to its junction with that river near Krishnaganj. (2) The Pitánú rises in the south of *parganá* Surjyapur, and, flowing south, unites at Ráníganj with the Rámján, which has itself received the Sadhánú. The course of these rivers is generally from north to south, through the police divisions of Krishnaganj and Balrámpur. The Pitánú is navigable for boats of 250 *mans* (about 9 tons) in its lower course, and for boats of 100 *mans* (about 3½ tons) up to Chagaliá. (3) The Nagar, which forms the boundary between the Districts of Purniah and Dinájpur, rises in the extreme north-east of *parganá* Surjyapur. It is liable to sudden inundations, and has a rapid current. It is not, therefore, much used for commercial purposes; but it is generally navigable in the rains for boats of 1000 *mans*, or say 36 tons burden, up to a point due east of Ráníganj, where there is a market village called Hárípur, in Dinájpur District; and for boats of 500 *mans* (18 tons) to where it leaves the Káliáganj police division. At Phánsidewá it is joined on the right bank by the Balásan, a hill stream of about the same size as itself. Eight miles lower down it receives the Chenga, another hill stream, with clear limpid water and a pebbly bed. Opposite Haldibárl it receives the Búrigangi, and a few miles farther down the Jamuná, both from the Nepál hills. (4) At the point where the Mahánandá leaves the *parganá* of Pawákhárl, the Mechl,

its first large affluent, flows into it. (5) The Kankái is said to have its rise in Thibet, beyond the highest summits of the Himálayas ; where it joins the Mahánandá, it carries a greater volume of water than the latter river. The greater part of its course in British territory is through the police division of Bahádurganj. On its left bank it gives off an old bed called the Mará Kankái, which presently rejoins the parent stream. The Kankái is navigable in the rains for boats of 250 *mans* (about 9 tons burden) from its confluence with the Mahánandá to the point where the old Kankái falls into it ; and above that for *ekds* of 50 *mans* to near Bahádurganj. A little below the market of Kútí it receives on its west bank the Ratuí, an unnavigable hill stream, which has itself received the Luneswarí and Kámal as tributaries.

AMONGST THE MINOR TRIBUTARIES OF THE RIVER GANGES not contained in the above system, the most westerly is the Barandí, whose lower reaches are also called the Kárá Kúsí. It joins the Ganges about five miles east of Kárágolá, having taken its rise about ten miles to the south-west of Purniah town, and, for the greater part of its course, flows in the *parganá* of Dharmpur. West of Dharmpur it is joined by the Livrí, which also has its source in the great plain to the west of Purniah. In the Manihárá police division there are several small streams,—the Kankar, the Kamaleswarí, the Báldíá, and the Kamlá.

CHANGES IN THE RIVER COURSES.—As I have stated above, half the District of Purniah owes its present physical characteristics to the steady westerly movements of the river Kúsí. Within late historic times—that is, from the beginning of the eighteenth century, we have evidence that this river passed below the town of Purniah and thence due south to the Ganges. It has since worked across some twenty-five miles of country, till at present it forms the western boundary of the District, most of its waters being now carried in the enlarged channel of the Dáús, which formerly marked the frontier towards Bhágalpur. Where the original bed of the Kúsí was, it is nearly impossible to state. Dr. Buchanan Hamilton notices the belief amongst the people, which he calls a tradition of the vulgar, that the river once took a course very much to the east of the bed earliest known to us. He also admits that the *pandits*, or learned natives, who inhabit its banks, refer to a period of remote antiquity when the Kúsí had no connection with the Ganges ; but, entering the District at the point where the Bakrá now does, broke away eastward

through the present *parganá* of Tájpur and the south of the present Districts of Dinájpur and Rangpur, to join the Brahmaputra in the east of Bengal. Dr. Buchanan Hamilton regards this tradition as highly probable, and thinks it not unlikely that the great chain of lakes and marshes north and east of Maldah are the remains of a great river bed formed by the united Kúsi and Mahánandá. He also suggests that it may have been the great increase in its waters, caused by a subsequent union of these rivers with the Ganges, that caused this latter river to desert the narrow channel of the Bhágirathí, and break for itself the new and wider bed of the Padma, within which it is still contained.

Dr. Buchanan Hamilton's suggestion of the union with the Brahmaputra seems less probable than other parts of his theory. The course of the Brahmaputra appears in early days to have run far to the east of the District of Máimansinh. The Kúsi also, in its eastward course, would first meet with the Kárátoyá, then a vast river, having the Atrái and Tístá for its affluents. In my Account of the District of Bográ (vol. viii. pp. 139, 142, 162), I have mentioned the very great importance of this river during early Hindu times, both on account of its great volume and its sanctity; and I have stated that it marks an ethnical frontier clearly defined down to the present day. If we assume that the Kúsi and the Mahánandá formerly joined the Kárátoyá, we have at once an explanation of the great size the latter river once undoubtedly had; and we shall also be able to account for the process by which the great sandy plain was built up between the Bárendra of Rájsháhl and the Madhupur Jungle of Maimansinh, through which the Brahmaputra made its way at the beginning of this century. The ethnical frontier, which begins to be uncertain in Dinájpur District, will be completed by adopting the above course for the Kúsi. On the left bank we shall have the Koch peoples, still found in such numbers in the Krishnaganj Subdivision of Purniah District, and in north Dinájpur. On the same side of the river would lie the kingdoms of Kirát, Kichak, and Kámrúp. The presence of a great river in the south of Dinájpur would account for the success with which the ruler, or Hákim as he was called, of that country, resisted the arms of the Musalmán sovereigns of Gaur. The ancient name of the Kúsi, and the one by which it is still known in Sanskrit books, is Kausáki. It is interesting to observe that a river nymph of this name is known, if not worshipped, on the banks of the Kárátoyá.

The bed of the river about three or four centuries ago seems to be marked by the line which divides the *pargands*, which down to the present day preserve their agricultural records under the Bengálí and *fasá* or Behárlí eras. It is well known that these systems of computation of time are founded on the Musalmán calendar, and, like it, date from the Hijrá or flight of Muhammad from Mecca. These systems came generally in use into the present District of Purniah about A.D. 1600. If the supposition be correct that the Kúsi formed the boundary between the tracts in which they were in use, then the course of that river passed east of the town of Purniah, and through the police division of Manihárlí, before it fell into the Ganges.

THE LOSS OF LIFE FROM DROWNING in Purniah District, according to the returns annually submitted by the police, is as follows:—139 lives in 1865; 87 in 1866; 164 in 1867; 162 in 1868; 166 in 1869; 150 in 1870; 152 in 1871; 157 in 1872; 73 in 1873; 219 in 1874; and 101 in 1875. These figures give an average loss of life for the eleven years ending 1875 of about 152 per annum. It is improbable that they represent the total loss of life from drowning, as many cases must occur every year which are not reported to the police, and accordingly are not entered in the returns.

FISHERIES.—The following return of fisheries, which was obtained under the operation of the Road Cess Act of 1871, shows the situations of the fisheries and the rent they pay to their proprietors:—In *pargand* Háveli Purniah—Rániganj, £6, 12s. 9d.; Saurá, £22, 10s. 0d.; and Ujháipur, 4s. 0½d. In *pargand* Káncjol—Amalsárlí, £2, 10s. 10½d.; Amalsárlí and Khadikátá, £2, 11s. 4½d.; Dhátágáchhlí, £2, 6s. 1½d.; Sháhnagar, 10s.; Taraf Náráyanpur, £2, 10s. 0d.; Taraf Chandápur, £1; Taraf Amdábád, containing three minor fisheries, £18; Taraf Gopálpur, £2, 8s. 0d.; Kabiá, £27, 5s. 0d.; Taraf Mathurápur, £3, 10s. 0d.; Taraf Goágáchhlí, with two fisheries, £16, 19s. 6d. In *pargand* Kholrá—Shikárpur, 7s. 6d.; Bánsráon (1), 13s. 6d.; Shikárpur, £1, 10s. 1½d.; and Bánsráon (2), £2, 14s. 0d. In *pargand* Kadabá—Sikroná, with two fisheries, £2, 11s. 6d.

LAKES AND MARSHES.—There are no lakes, properly so called, in Purniah. There are, however, numerous marshes in all parts of the District, and chiefly towards the south-east. These never become entirely dry, but are reduced towards the end of the dry

season within much narrower limits than at other times of the year. The following list of marshes, which was prepared in 1872 by the Collector, gives the police divisions within which they are situated, and the length or estimated area of each:—In Matiyárl police division—Kotápur, 10,000 *bighás*; Chánd Hingná, 3000 *bighás*; Píprá, 2000 *bighás*; Kharsáil, 700 *bighás*; Káwaldahá, 600 *bighás*; Shahájpur, 500 *bighás*; Ramái, 400 *bighás*; Chakradahá, 300 *bighás*; and Matiyárl, 150 *bighás*. In Krishnaganj police division—Dabjál, 3600 *bighás*; Káihán, 180 *bighás*. In Rániganj—Dhamakbandha, 3000 *bighás*. In Maniyárl—Náráyanpur, 1000 *bighás*; Beluá, 1500 *bighás*; Mednipur, 500 *bighás*; Rámpur, 200 *bighás*; Mathor, 200 *bighás*; and Chawán Báldiábárl, 100 *bighás*. In Aráryá—Chándora, 1000 *bighás*; Luriyá, 900 *bighás*; Harna, 200 *bighás*; Chándkatná, 200 *bighás*; Chándsalduhi, 100 *bighás*; Jogendra, 50 *bighás*; Phalpur, 50 *bighás*; Bhírbhírl, 2 miles; Gaya Ghátl, 10 miles; Siktí, 4 miles; Kátná, 2 miles; Marsandá, 1 mile; Doma, 1 mile; Barna, 1 mile; Dánga, 1 mile. In Gondwára—Sakhásan, 150 *bighás*; Semriá, 200 *bighás*; Syámapur, 300 *bighás*; Darnithán, 200 *bighás*; Bandartál, 500 *bighás*. In Kadbá—Pratáp Jhíl, 100 *bighás*; Bánkl, 150 *bighás*; Sakroná, 800 *bighás*; Lokhurá, 50 *bighás*; Arangi, 50 *bighás*; Gosakpúr, 80 *bighás*; Jhabrá, 50 *bighás*. In Balrámpur—Dalhár, 450 *bighás*; Lauharkashní, 360 *bighás*; Dhandá, 480 *bighás*; Bani, 900 *bighás*; Chándkasútl, 112 *bighás*. In Káliáganj—Damká, 60 *bighás*; Kauriá Mani, 60 *bighás*; Bhírbhígi, 60 *bighás*; Halhall, 60 *bighás*; Kachúdá, 300 *bighás*. In Bahádurganj—Dánga, 480 *bighás*; and Chánd Barokoná, 900 *bighás*.

PASTURAGE GROUNDS are of greater extent in Purniah than in any other tract of equal size in Bengal or Behar. As I have before noticed, one of the most marked physical characteristics of the District is the great grassy plains, or *rámnds*, that surround the Headquarters Station, and extend nearly to the northern and western frontiers. These expanses of country are used during the rains as pasture grounds, and form valuable properties. During the cold and dry seasons, from the end of October to the middle of June, they are left as open commons, on which any one's cattle may browse, the sandy soil producing very scanty vegetation at these seasons. With the first shower of the rains, however, the owners take a greater interest in their property. They set up a bamboo in each field, an operation known as *chheko dend* and *janda gár-dend*,

which is a sign that occupation has been resumed, and that all cattle found trespassing will be sent to the nearest pound. This is also usually to be regarded as a notification that the land is to let. The Goálás or cowherds soon come forward ; and as the floods rise in the outlying *parganá*s along the Kúsi *chars*, the Ganges *didrás*, and the low land of Gondwára, Kadba, Badaur, and Surjyapur, the demand increases. In years of ordinary inundation, a *rámná* of 100 local *bighás*, or 40 acres, lets for Rs. 75 or £7, 10s. od. for the rainy season. The lease usually runs to the following Hindu festival of the *Dhwálí*, about the 10th or 20th of October, after which the pasture grounds revert to their old condition of common land. They then no longer afford sufficient sustenance for large herds, and the Goálás drive off their cattle to the Murang of Nepál, or to the lowlands of *parganá* Dharmpur, and along the Ganges. Most of the two latter tracts are the property of the Mahárájá of Darbhanga, who never receives any rent on account of cattle, as he considers it an act of piety to feed in this way animals sacred in the eyes of a Hindu. For buffaloes he demands a small fee. In Nepál a somewhat similar regard is shown to oxen, no money payment for grazing being received. The owner of the land, however, expects to be presented with the finest two-year-old bull-calf of the herd, when the Goálás start in June for the plains. If he is not allowed his free choice, he usually finds some reason to render inoperative his veneration for the cow ; and the herd, if it succeed in quitting the hills undiminished in number, will scarcely do so if it comes northward another year. Quarrels between herdsmen and Nepálís are said to be rather frequent. Nor is this the only difficulty that the herdsmen have to contend with in obtaining pasturage in the north of the District. The low Musalmáns of the Krishnaganj Subdivision are noted cattle-lifters. They do not, however, make much profit on the crime, as they kill and eat the cattle immediately after the theft, selling only the skin and horns. In Dharmpur, another source of heavy loss is caused by tigers, a herd often losing ten per cent. of its numbers during the period between October and June.

The grazing ground usually goes with the village lands, and the rate of rent varies from 2 to 5 *ánnds* (3d. to 7½d.) per *bighá*. The large plateau from Matiyárl to Purniah, about 40 miles in length and 6 miles in breadth, is practically all grazing ground. In the Statistical Return for 1868-69 submitted to the Board of Revenue, the area of the District at the end of that year was shown to be

5218 square miles; and of this area, pasturage lands were entered as covering 900 square miles, or 576,000 standard *bighás*, worth 2 *ánnás* per *bighá* (9d. an acre) all round, or £7,200 per annum.

THE *FERÆ NATURÆ* of Purniah are not so numerous as in the neighbouring Districts. At the same time, the fauna is larger than that of many midland tracts, inasmuch as, besides the animals of Bengal or Behar Proper, representatives of species found in the lower Himálayas and the Tarái or submontane tract are often met with. Monkeys are rare, the *bandar* (*Inuus rhesus*) alone being found. Bats are not numerous except along the Tarái, where the vampire (*Megaderma lyra*) is in places a pest. The frugivorous bats are represented by two or three species of Pteropi and Cynopteri. Leaf-bats are very plentiful on the northern frontier, the long-eared *Rhinolophus perniger* being common. The shrews are not so often seen as in drier soils, but the musk-rat or *chhachhunda* (*Sorex cærulescens*) is found in most masonry houses. The Indian bear (*Ursus labiatus*), once numerous, is now rarely seen. The badger is also an animal not frequently met with. Weasels (*Mustela*) are found in the sandy plains, the yellow-bellied weasel (*M. Kathiah*) being found in the Tarái. The otter or *uth* (*Lutra nair*) is common, and is killed for the sake of its skin, which the Nepálís value highly.

The tiger is the best known of the large animals of Purniah, and is found in all parts of the District, but particularly along the banks and among the sandy islands of the Kúsi, where it finds shelter in the high grass jungle with which the country is covered. Another tract much frequented by tigers is the scrub jungle that runs along the north of the District. A few also come from near Gaur in Maldah, and from the *sál* forests of the north Bárendra in Dinájpur. In 1788, the Collector, in reporting on the ravages committed by these animals in *parganá* Kadbá, stated that £600 was annually paid out of his office for tigers killed in Purniah, at the rate of £1 per head. He, however, suspected that many of the heads brought by the *bághmárs* came from the Murang of Nepál. Of late years, also, the rewards given for the destruction of tigers and leopards have been large. They were—In 1863-64, for 13 tigers, £5, 16s. 8d., and 10 leopards, £1, 16s. 8d.; in 1864-65, for 5 tigers, £2, 10s. 0d., and 3 leopards, 15s.; in 1866-67, for 30 tigers, £14, 6s. 6d., and 71 leopards, £14, 11s. 6d.; in 1867-68, for 103 tigers, £37, 1s. 8d., and 262

leopards, £40, 13s. 3d.; in 1868 69, for 65 tigers, £25, 16s. 3d., and 100 leopards, £17, 16s. 7½d.; in 1869, for 2 tigers, £1, and 5 leopards, £1, 5s. od.; in 1870, for 50 tigers, £24, 10s. od., for 72 leopards, £16, 11s. 8d., and 2 hyænas, 8s., in 1873, for 5 tigers, £2, 10s. od.; in 1874, for 32 tigers, £65, 152 leopards, £69, 5s. od., and 1 hyæna, 4s., in 1875, for 31 tigers, £71, 5s. od., 176 leopards, £81, 5s. od., and 2 hyænas, 8s. Total for the twelve years, £249, 16s. 6d. paid for killing 336 tigers, and £243, 19s. 8½d. for 851 leopards, or, on an average for the twelve years, there were 28 tigers killed annually, for which £20, 16s. 1½d. was paid, and 71 leopards, for which the rewards amounted to £20, 6s. 7½d. There were also 5 hyænas killed during the 6 years 1870 to 1875, and a reward of 4s. given for each of them. Deaths caused by wild beasts from 1863 to 1875 are returned by the Collector as follow. —12 in 1863, 39 in 1864, 8 in 1865, 13 in 1866, 9 in 1867, 30 in 1868, 7 in 1869, 11 in 1870, 13 in 1871, 23 in 1872, 10 in 1873, 15 in 1874, and 28 in 1875. Total for the thirteen years, 184, or an annual average of 14.

The contrivance by means of which tigers and leopards are killed is a very simple and successful one. When one of these animals is found to be present in any locality, his movements are watched by the *shukáris* or huntsmen, who secrete themselves near his haunts, and principally near the tank or stream where he goes to drink. At two or three points near which it is probable that he will pass, a split bamboo, with all the knots cut out, is placed on a rest about a foot and a half from the ground. To the end directed towards the tiger's path a strong bow is attached, the string of which, when bent, is fastened in a notch near the other end. In the hollow of the bamboo an arrow lies, which is made from some hard wood or old bamboo, well sharpened and poisoned with the juice of a plant, which, from the description of the natives and the fact that it comes from the Murang, the general name in Purniah for the lower Himálaya, I believe to be aconite. A long piece of firm cord is tied to the bow-string near the notch, and stretched forward across the tiger's path. As he comes along he usually trips over the cord, thereby discharging the arrow, which generally hits him just behind the shoulder. The wound is often so severe as to be of itself fatal, but if not, the poison soon causes death. A man is always on the watch somewhere near, to see if the arrow has taken effect or not, and to warn off any one coming that way. If,

however, any one does stumble over the cord, the arrow passes behind him, unless he is so unfortunate as to fall back. Another protective contrivance is called the *dhamsút*, which is a cord stretched obliquely across the path at some distance from the bow, but attached to the bow-string. It is about four feet from the ground, so that the tiger can pass under it, but the horns of a cow or a man's head would strike against it. The poisoned arrow would thus be discharged before the cow or man came within its fatal reach. The wounded tiger is tracked to his lair, and watched till he dies. His skin and skull are then taken to the Collector, in whose presence the latter is broken to pieces before the reward of £2, 10s. od. is paid. The skins are rarely worth preserving, being usually mutilated, the paws being cut off and the hair much injured by the rough treatment of the hunters.

Leopards are very common along the Dinájjpur frontier, and are killed in the same manner as tigers. In the same tract, and near the Taráí, tiger cats (*Felis viverrina*), leopard cats (*F. Bengalensis*), and wild cats (*F. chaus*) are abundant. The hyæna is occasionally seen in the north of the District. Civets are not so common as in neighbouring Districts, as there is not much of the high scrub jungle which they most frequent. Tree cats are met with in all the northern, eastern, and southern police circles, the *khatás* (*Paradoxurus musanga*) being very common in Balrámpur. The mungoose is not very abundant, but both the Bengal and Nepál species are found. I have not heard of any wolves having been seen of late years in Purniah, but formerly they were not rare. The jackal (*Canis aureus*) is very common. Squirrels, rats, hares, and porcupines are met with, but none of them are so numerous as in most Behar Districts. Hares are eaten by all classes of Hindus, and porcupines by Musalmáns. The elephant is now only a domestic animal in Purniah, the few wild specimens that existed at the beginning of this century having been long ago secured. The Indian pig (*Sus Indicus*) is plentiful, but is less pursued for sport than in Bengal. Deer are few; the *bhrasingha* or swamp-deer (*Rucervus Duvancellii*), the spotted deer (*Axis maculatus*), and hog deer (*A. porcinus*) are met with. The antelope (*A. Bezoartica*) is often seen on the open plains in the north.

BIRDS.—The absence of tree jungle in the greater part of the District has the effect of rendering birds comparatively few in number and in species. The common vulture (*Gyps Bengalensis*) and the black

vulture (*Otogyys calvus*) are, however, numerous. Fish eagles are common on the banks of the larger rivers. The osprey is found in similar situations. Swallows and swifts are not often seen, and even the roller or jay (*Coracias*) is rare. Kingfishers are abundant in the eastern marshes, both the species, *Alcedo Smyrnensis* and *Halcyon leucocephalus*, being found. I have not seen *Ceryle rudis*, but it probably exists. Hornbills have been met with. Parrots and paroquets are rare in the south of the District, but occur in very large numbers along the northern frontier. The cuckoo does not remain long in the District on its passing southwards in the cold weather. It breeds in the Himālaya, and its call is never heard. The nearly-related *koel* is, however, well known. The pied cuckoo is sometimes heard about August. Crow pheasants may be seen in the Tarāi. Small birds, such as nut-hatches, orioles, and humming-birds, are very rare. The crested shrike (*Lanius cristatus*) is one of the earliest visitants from the hills in the winter. The cuckoo and Drongo shrikes are also seen towards the north of the District. Fly-catchers (*Tchitria*) are confined to dry situations, where bushes abound. The best-known members of the thrush family are the *sāth bhāi* (*Malacocercus terricolor*) and the bulbuls, a species of *Pycnonotus*. The wagtail is a very common cold-weather bird, and breeds in the neighbouring Himālayan mountains. The common crow is to be seen at all seasons and among starlings, the *māinas* are nearly as numerous. Finches and larks are abundant near some marshes, in which the wild rose grows in profusion. Green pigeons (*Crocopus*) are not so common as in Bengal Districts, as they do not find sufficient of their favourite food, the figs of the banyan and *pīpāl*. Pea-fowl are plentiful in the south of the District, and with the *kaim*, a species of water-hen (*Gallinula porphyrio*), consume much grain, and cause heavy loss to the farmers. The common jungle fowl (*Gallus ferrugineus*) is abundant in the sub-Tarāi country. The black partridge or francolin is found in all parts of the District in considerable numbers; the grey partridge is more rare. The former frequents low grass, where its presence is readily discoverable by an incessant, loud, whistling noise. Quail abound during the cold weather in the rice stubble and the *rabi* fields. As in Dr. Buchanan Hamilton's time, snipe, plover, and florican, or lesser bustards, are very plentiful. The plover family is represented by the golden plover, the spur-winged plover, and the courier plover, the latter of which is most found on the banks of the Ganges and

Kúsl. Cranes (*Grus Antigone* and *G. cinerea*) are, towards the east, found in every marsh, and do much injury to rice, breaking and eating it. Swimming and wading birds are rather numerous. The avocet is seen on sandy islands in the large rivers, together with sand-pipers and red-shanks. The stilt (*Himantopus candidus*) and the purple coot are seen in the marshes. The adjutant is more plentiful than in Western Behar, and the white-necked stork (*Ciconia leucocephala*) is very common. The purple heron and the white heron or paddy-bird are found, the latter near every pool in the rains. Bitterns are occasionally heard, and the shell ibis (*Anastomus oscitans*) frequents the southern swamps. \ast numbers of geese and duck are to be seen all over the tracts subject to inundation, and where the water rests during the greater part of the cold weather. The most common species are the grey goose (*Anser cinereus*), the bar-headed goose (*A. Indicus*), the pink-headed duck (*Anas caryophyllacea*), and the pin-tail (*Dafila acuta*). Teal (*Querquedula crecca*), gargany (*Q. circea*), whistling teal (*Dendrocygna*), pochards (*Aythya ferina*), and widgeon (*Mareca Penelope*) are all met with.

PREVIOUS ATTEMPTS TO ASCERTAIN POPULATION.—The earliest estimate of the population of the District of Purniah that I have met with in the records was made by the Collector in 1789, and does not pretend to much statistical accuracy, being based ‘on the average of an actual investigation of three small villages, multiplied by 5800; the number of villages in the District.’ The results obtained were:—Men, 307,400; women, 327,700; boys, 224,400; girls, 176,900: total, 1,061,400; to which were added for Purniah and other large towns, 138,600, making the total of inhabitants 1,200,000. It is remarked that ‘the great difference in the number of boys and girls must arise from the latter being considered as adults at the age of eleven or twelve, and the former not till they reach their twentieth year;’ and that ‘general opinion swells the grand total to 1,500,000 inhabitants.’

Dr. Buchanan Hamilton, *circa* 1811, calculated that the population of the whole District, as then constituted, was 2,904,380 souls—an excessive estimate, even after making all allowances for the greater extent of the Purniah jurisdiction at that time. Subtracting the population of the Dimiya police circle, which has been transferred to Bhágalpur, and of Kharwa Nehnagar, Bholahát, Sīgganj, Káliá-chak, and Gárgáribá, now comprised in Maldah District, to which

he assigned a total population of 695,880, the remaining population of 2,208,500 is much greater than that ascertained by the Census of 1872. That there has been a decrease in the population is improbable. All the evidence points to a marked extension of cultivation during the last half-century, and it seems certain that there has been a corresponding advance in the numbers of the people. Dr. Buchanan Hamilton's estimates were founded on the extent of cultivated land, a subject on which much better information seems to have existed in his time than now. He calculated that he might 'allow from fifteen to nineteen Calcutta *bighás* of cultivated land for every family of five cultivators, young and old, men and women.' He seems to have been impressed by the density of the population, and refers to 'the immense population by which the country is overwhelmed.' He adds, however: 'The population seems in some places to be diminishing, for the extreme timidity and listlessness of the people has in some parts prevented them from being able to repel the encroachments of wild beasts. This, however, is only a local and recent evil, and within the last forty years the population has, I am credibly informed, at least doubled.' The following are his detailed figures, which are interesting as showing the parts of the country in which population was densest in those days. Purniah police circle, 430 square miles; population—Hindus 67,000, Musalmáns 87,000; total, 154,000; population per square mile, 202. Dánkhora, corresponding to the present Kadabá *thánd*—400 square miles; population—Hindus 115,000, Musalmáns 69,000; total, 184,000; population per square mile, 460. Gondwára—453 square miles; population—Hindus 118,000, Musalmáns 39,000; total, 157,000; population per square mile, 341. Dam-dahá, corresponding to the present *thánds* of Ránlganj and Dam-dahá, 614 square miles; population—Hindus 195,000, Musalmáns 65,000; total, 260,000; population per square mile, 423. Matiyárl, 363 square miles; population—Hindus 125,000, Musalmáns 41,000; total, 166,000; population per square mile, 457. Aráriyá, 305 square miles; population—Hindus 71,000, Musalmáns 71,000; total, 142,000; population per square mile, 466. Bahádurganj, 584 square miles; population—Hindus 164,000, Musalmáns 98,000; total, 262,000; population per square mile, 449. Udhráil, corresponding to the present *thánd* of Káliáganj, 376 square miles; population—Hindus 77,500, Musalmáns 99,000; total, 176,500; population per square mile, 496. Krishnaganj, 395 square miles;

population—Hindus 92,000, Musalmáns 154,000; total, 246,000; population per square mile, 623. Dulálganj, corresponding to the present *tháná* of Amúr-Kásbá, 271 square miles; population—Hindus 55,000, Musalmáns 91,000; total, 146,000; population per square mile, 539. Nehnagar, corresponding to the present *tháná* of Balrámpur, 350 square miles; population—Hindus 69,000, Musalmáns 116,000; total, 185,000; population per square mile, 528. Manihári, 336 square miles; population—Hindus 98,000, Musalmáns 32,000; total, 130,000; population per square mile, 387.

In the statistics of the Lower Provinces of Bengal for 1868-69, published by the Board of Revenue, the population of Purniah District is returned at 951,874 souls; but it does not appear on what grounds these figures were adopted.

THE CENSUS OF 1872.—According to the Census Report of Mr. Beverley, C.S., the arrangements for the census of Purniah District were elaborated with very great care, and I find that the results are generally of high statistical value. The preparation of the registers of villages in each police circle was undertaken at the commencement of 1870; and the experience of the difficulties that were thus early brought to light was of the greatest importance in determining the orders that were subsequently issued for general guidance. The materials that the Collector had to work with were very meagre, consisting of the *chaukidárs'* registers of villages, which inquiry showed to be grossly inaccurate, and *parganá* maps of the Revenue Survey. Very much of the work was done by the Collector himself. 'The first thing to be done,' the Report states, 'was to trace the District and *tháná* boundaries upon these maps, and this work was performed by Mr. Worgan with his own hand, and occupied him a whole month. He then, also with his own hand, compiled lists of all the survey *halkás*, with their survey numbers, found to fall within the boundaries of each *tháná*, which lists were subsequently copied in alphabetical arrangement. This occupied several months more. The lists were then distributed to Subdivisional officers and others, to be tested by comparison with the police registers and by local inquiry.' The constant movements of the river Kúsi in the west of the District, and the very low state of civilisation presented by the people of the northern and eastern police divisions, presented further difficulties. The final arrangements were these:—The sub-inspectors in charge of police circles were made census supervisors within their own jurisdictions, under the control of the

Subdivisional officers. Every police circle was subdivided into four sub-circles to each of which a deputy-supervisor was appointed, whose duty it was by personal local inquiry to ascertain the number of hamlets and homesteads in each *mauza* or village area, and the most suitable persons to be appointed enumerators. They were each allowed four runners for the purpose of communicating readily with the supervisor, who was required to report each day's proceedings to the Subdivisional officer. The best enumerators procurable were appointed, the village *patwáris* being in most cases the persons selected. The total number was 2201. Orders were issued to all resident *zamindárs* paying more than Rs. 50 revenue, requesting them to direct the attendance of their *patwáris* and other *zamindári* servants, when required, at the police station, and a paid enumerator was stationed at each of the sixty-five *gháts*, or landing-places and ferry crossings, in the District, to enumerate the floating population.

The population is most dense in the rich alluvial plain extending from the Kankái to the Nágar, which is watered by the Mahánandá and its affluents; the highest average of inhabitants to the square mile being found in the police circle of Krishnaganj, with 449 souls to the square mile, and Bahádurganj with 442. The tract next in order, as regards density of population, is the police circle of Aráriyá, watered by the Panár and the Ratuá, with 424 to the square mile. The eastern and east-central police circles of Káliáganj, Balrámpur, and Kadbá, with 394, 359, and 368 respectively to the square mile, are also well peopled; whilst the central *thánás* of Purniah, with 351, and Amúr-Kásbá, with 401 to the square mile, show a higher average than that common to the whole District. The population diminishes both to the south and west, along the banks of the Ganges and the Kúsi, a circumstance due to the devastating overflow of these rivers. The two Gangetic Divisions of Gondwára and Manihári have only 252 and 216 to the square mile respectively. Along the Kúsi the population grows more and more sparse from north to south. In Matiyárl, on the Nepál frontier, it is 325 to the square mile, which is succeeded by 309 in Rániganj and 199 in Damdahá.

The table on the following page shows in detail the population in each police circle and Subdivision in the District, with the number of villages and houses, etc. The table is reproduced verbatim from the Census Report of 1872.

STATISTICAL ACCOUNT OF PURNIAH.

ABSTRACT OF POPULATION, AREA, ETC. OF EACH SUBDIVISION AND POLICE CIRCLE (THANA) IN
PURNIAH DISTRICT, 1872.

Subdivision.	Police Circle (thana).	Area in Square Miles.	Number of Villages, Hamlets, or Townships.	Number of Houses.	Total Population.	Averages according to the Census Report.				
						Persons per Sq. Mile.	Villages, Hamlets, or Townships per Sq. Mile.	Persons per Village or Township.	Houses per Sq. Mile.	Persons per House.
1. SADE OR HEAD-QUARTERS.	Purniah.	424	416	31,042	148,619	351	'98	357	73	4.8
	Damdah.	514	223	20,100	102,338	199	'43	459	39	5.1
	Gondwari.	421	215	21,507	106,158	252	'51	494	51	4.9
	Manihari.	240	133	13,655	51,929	216	'55	390	57	3.8
	Kadbi.	365	543	26,536	134,158	368	1.49	247	78	4.7
	Bairampur.	393	599	22,580	115,961	359	1.85	194	70	5.1
	Amur-Kadbi.	285	505	20,313	114,147	401	1.77	226	71	5.6
Subdivisional Total.		2,572	2,634	157,733	773,310	301	1.02	294	61	4.9
2. ARARIYA.	Arariya.	431	331	32,478	182,871	424	'77	552	75	5.6
	Raniganj.	341	153	19,153	105,466	309	'45	689	56	5.5
	Matyari.	273	196	15,610	88,718	325	'72	453	57	5.7
	Subdivisional Total.	1,045	680	67,241	377,055	361	'65	554	64	5.6
3. KRISHNAGANJ.	Bahadurganj.	393	292	27,072	173,511	442	'74	594	69	6.4
	Krishnaganj.	321	252	24,209	144,164	449	'79	572	75	6.0
	Kaliaganj.	626	321	37,192	246,755	394	'51	769	59	6.6
	Subdivisional Total.	1,340	865	88,473	564,430	421	'65	653	66	6.4
DISTRICT TOTAL.		4,957	4,179	313,447	1,714,795	346	'84	410	63	5.5

POPULATION CLASSIFIED ACCORDING TO SEX AND AGE.—The total population of Purniah District amounts to 1,714,795 persons, of whom 876,320 are males, and 838,475 females. The proportion of males in the total population is 51·1 per cent, and the average density of the population is 346 per square mile. Classified according to age, the Census gives the following results :—Hindus—under twelve years of age, males 186,081, females 149,246 ; above twelve years, males 331,598, females 355,084. Muhammadans—under twelve years, males 141,187, females 105,539 ; above twelve years of age, males 216,122, females 227,301. Christians—under twelve years of age, males 58, females 51 ; above twelve years, males 168, females 126. Other denominations not separately classified, consisting of aboriginal tribes—under twelve years of age, males 425, females 319 ; above twelve years, males 681, females 809. Population of all religions—under twelve years of age, males, 327,751, females 255,155 ; above twelve years, males 548,569, females 583,320. The small proportion of female to male children, and the excessive proportion of females above twelve years, were, as has been already mentioned, referred to by the Collector in his Census estimate in 1789. The proportion of the sexes of all ages is probably correct.

The number of insanes in Purniah District is returned as follows in the Census Report :—Males 66, females 22 ; total 88, or '0051 per cent. of the population. Idiots—males 118, females 46 ; total 164, or '0096 per cent. of the population. Deaf and dumb—males 249, females 55 ; total 304, or '0177 per cent. of the total population. Blind—males 389, females 77 ; total 466, or '0272 per cent. of the population. Lepers—males 341, females 44 ; total 385, or '0225 per cent. of the population. The total number of persons in the District afflicted with the above-mentioned infirmities is 1407, or '0821 per cent. of the population. The number of females as compared with that of males seems suspiciously small.

POPULATION CLASSIFIED ACCORDING TO OCCUPATION.—In Accounts of other Districts I have had to remark on the unsatisfactory nature of the returns obtained under this head at the time of the Census of 1872. Although these figures in Purniah share in the uncertainty that attaches to such a classification in India, where each caste assigns certain occupations to its members, who, however, often really follow very different pursuits, the returns for this District seem as accurate as anything we can hope for, for a long time to come. At a previous page I have pointed out the careful nature of the

preparations made for the Census of 1872 during the two preceding years. One of these was the training of the subordinate officials in charge of the operations, and the thorough explanation to them of the distinction between 'caste' and 'occupation' in their European significations. The following paragraphs are accordingly trustworthy to an extent which renders them of some statistical value. In the occupation of males, the figures under Class I. seem throughout correct. The professional return also seems valuable, with this explanation—that such headings as those of spiritual guide and Muhammadan priest are confined to the persons who actually follow these professions and none other. Those persons who are distinctly known as, and called, *gúrú* and *mullá*, are probably not more than are given in the returns. Similarly, there are more cooks than 136; but the number of persons whose surname, as it were, is *báwarchí*, that is, who are called *báwarchí*, as is the case with about a dozen families in the town of Purniah, is not greater. In the case of *patwáris* also, the number is not limited to 312, but this figure represents the number whose special and almost sole occupation is that of village accountants.

OCCUPATION OF MALES.—CLASS I.—Persons employed under Government, municipal, or other local authorities:—Government police, 302; rural police or village watchmen, 5884; Covenanted English officers, 5; subordinate judicial officers, 4; subordinate executive officers, 2; Public Works officers, 6; Post Office officials, 26; Telegraph Office officials, 2; medical officer, 1; excise officers, 42; officers in charge of opium cultivation and revenue, 31; clerks, 29; municipal officers, 42; *piyáds* or messengers, 44; others, 427. Total of Class I., 6847.

CLASS II.—Professional persons, including professors of religion, education, law, medicine, and fine arts:—(a) Religion—Hindu priests or *purohīts*, 1308; spiritual guides (*gúrús*), 6; *acháryyas*, astrologers and fortune-tellers, 8; Muhammadan priests (*mullás*), 3; missionary, 1. (b) Education—Schoolmasters, 4; students, 38; teachers, 202. (c) Law—Pleaders, 43; law agents (*mukhtárs*), 153; stamp vendors, 18. (d) Medicine—Doctors, 6; Musalman and Hindu physicians (*hakıms* and *kabirdjis*), 143; cow-doctor (*gobáidyas*), 1; accoucheurs, 7; inoculators, 35. (e) Fine arts—Painters, 133; musicians, 268; singers, 33; dancers, 136; jugglers, 28; buffoon, 1. (f) Engineering and surveying—*Amıns* or surveyors, 4. Total of Class II., 2579.

CLASS III.—Persons in service or performing personal offices:—

(a) Domestic servants—Personal servants, 2255; cooks, 136; others, 398. (b) Others—Barbers, 4170; washermen or *dholis*, 2105; sweepers (*mihars*), 228; water-carriers (*bhishtis*), 42; gardeners (*malis*), 148; doorkeepers (*darwadns*), 150; unspecified, 30,744; innkeeper, 1; pimp, 1. Total of Class III., 40,378.

CLASS IV.—Persons engaged in agriculture and with animals:—

(a) In agriculture—Landholders (*samindars*), 1641; middle-men (*mustajirs*), 26; holders of land on military tenures (*ghatwadis*), 12; cultivators, 271,938; village head-men (*mandals*), 8; *samindari* servants, 8; land stewards (*gumshidis*), 92; rent collectors (*tahsil-dars*), 42; village accountants (*patwadris*), 312; *gordits*, a species of village watchmen on behalf of the landlord, 276; holders of land on a tenure of police service (*paliks*), 795; labour-gang overseers (*daffadars*), 39; managers of courts of wards, 3. (b) With animals—Dealers in horses, 7; dealers in cattle, 32; dealers in goats, 2; dealer in pigs, 1; shepherds, 2572; cowherds, 391; jockeys, 14; elephant drivers (*mahuts*), 278; grooms, 192; grass cutters, 143; farriers and shoeing smiths (*naibands*), 13; hunters (*shikaris*), 26. Total of Class IV., 278,863.

CLASS V.—Persons engaged in commerce and trade:—(a) In conveyance of persons and goods—Cabmen, 2; carters, 2367; palanquin bearers, 1195; cart owners, 11; boatmen, 2164; boat owners, 94. (b) In keeping and lending money, and in the sale of goods—Weighmen, 24; cashiers, 6; money-lenders (*mahdjans*), 1805; merchants or *sauddgars*, 755; merchants in special goods, 48; petty dealers (*depars*), 269; traders, 2220; shopkeepers, 16,169; hawkers (*bisatis*), 21; brokers (*daldis*), 50; messengers (*piyaddis*), 21; vernacular clerks and writers (*muharrirs*), 365; agents, 4; clerks, 41. Total of Class V., 27,631.

CLASS VI.—Persons employed in mechanical arts, manufactures, and engineering operations, and in the sale of goods manufactured or prepared for consumption. (a) Manufactures—Indigo manufactures, 96; leather workers, 210. (b) Constructive arts—Contractors, 548; bricklayers (*rdjmistris*), 251; lime burners, 155; carpenters, 2845; brick dealers, 9; diggers, 299. (c) Miscellaneous artisans—Blacksmiths (*kamars*), 1502; braziers (*kansaris*), 164; tinmen, 15; goldsmiths (*sondars*), 1126; jewellers (*jauhdaris*), 6; potters (*kumbhars*), 2818; glass-makers, 29; crockery vendors, 17; sellers of minium or red oxide of lead, 11; comb-makers, 35; mat-

makers, 16 ; basket-makers, 1112 ; hookah-makers, 8 ; makers of lacquered ware, 579 ; makers of garlands, 413 ; polishers, 102 ; cotton spinners, 8695 ; carpet-makers, 47 ; dyers, 191 ; tailors, 992 ; turban-makers, 2 ; sellers of shoes, 1336 ; saddler, 1 ; cloth vendors, 1152 ; maker of gunny-bags, 1 ; cotton carders, 599 ; cotton vendors, 63 ; blanket-makers, 81 ; ornament stringers, 140 ; printers, 2 ; bookbinders, 24 ; picture sellers, 3 ; booksellers, 2. (d) Dealers in vegetable food—Oil sellers, 5548 ; grain sellers, 2096 ; rice sellers, 305 ; sellers of spices, 73 ; sellers of vegetables, etc., 515 ; bakers, 16 ; grain parchers, 175 ; confectioners, 802 ; sellers of *gúr* or molasses, 15. (e) Dealers in animal food—Butchers, 51 ; fishermen, 8312 ; fishmongers, 477 ; bird catchers, 78 ; milkmen, 2459 ; butter sellers, 18. (f) Dealers in drinks—Spirit sellers, 156 ; *tári* sellers, 150. (g) Dealers in stimulants—Tobacco sellers, 124 ; opium sellers, 18 ; *gányá* sellers, 72 ; *pán* (betel leaf) sellers, 1086 ; *madat* sellers, 6. (h) Dealers in perfumes, drugs, medicines, and chemicals—Perfumers, 3 ; sellers of salt, 69 ; sellers of saltpetre, 165 ; sellers of fireworks, 21 ; sellers of soap, 2 ; sellers of tooth-powder, 2. (i) Dealers in vegetable substances—Firewood sellers, 227 ; charcoal sellers, 2 ; rope sellers, 39. (j) Dealers in animal substances—Vendors of hides, 433 ; tanners, 314. Total of Class VI., 48,526.

CLASS VII.—Miscellaneous persons not classed otherwise :—Pensioners, 4 ; apprentices, 6 ; beggars, 3056 ; wrestlers, 7 ; labourers, 132,596 ; male children, 327,732 ; unemployed, 8095. Total of Class VII., 471,496. Total of males, 876,320.

OCCUPATION OF FEMALES.—The general caution prefixed to the paragraphs on the occupations of the people applies with particular force to this section.

CLASS I.—*Nil*.

CLASS II.—Professional persons :—(a) Religion—priestesses, 24. (b) Medicine—Midwives, 7 ; vaccinators, 2. (c) Fine arts—Dancers, 3. Total of Class II., 36.

CLASS III.—Females in service, or performing personal offices :—(a) Domestic—Cooks, 4 ; personal servants, 64 ; unspecified, 204. (b) Others—Barbers, 8 ; washerwomen, 47 ; sweepers (*mihtránts*), 13. (c) Innkeepers and keepers of public entertainment—Hotel-keepers, 5 ; prostitutes, 30. Total of Class III., 375.

CLASS IV.—Females employed in agriculture and with animals :—(a) In agriculture—Female landlords (*samindars*), 52 ; cultivators,

1495. (b) With animals—Shepherdesses, 16; dealers in cows, 4. Total of Class IV., 1567.

CLASS V.—Females engaged in commerce and trade:—(a) In conveyance of persons and goods—Cart owners, 4. (b) In lending money and sale of goods—Money lenders, 39, retail dealers, 19; shopkeepers, 839; petty dealers (*depiris*), 9. Total of Class V., 910.

CLASS VI.—Females employed in mechanical arts, manufactures, and in the sale of goods manufactured or prepared for consumption:—(a) Miscellaneous artisans—Contractors, 5; dealers in pottery, 41; sellers of flowers, 13; basket-makers, 36, mat makers, 12; shoemakers, 4; spinners, 603, weavers, 59, ornament-makers, 17; embroiderer, 1; sellers of cotton, 5; tailors, 18; cotton carders, 30. (b) Dealers in vegetable food—Dealers in grain, 5; rice dealers, 34, costermongers, 27, oil sellers, 216; confectioners, 3; grain parchers, 34. (c) Dealers in animal food—Fishwomen, 250; milk sellers, 167; butchers, 4. (d) Dealers in drinks—Toddy sellers, 17. (e) Dealers in stimulants—Tobacconists, 5, betel sellers, 25. (f) Dealers in perfumes, drugs, medicines, etc.—*Tika* sellers, 6; sellers of tooth-powder, 2, perfumers, 3; seller of minium or red oxide of lead, 1. (g) Dealers in vegetable substances and fuel—Firewood sellers, 8, grass dealers, 8. (h) Dealers in animal substances—Hide vendor, 1; tanners, 67. Total of Class VI., 1727.

CLASS VII.—Miscellaneous persons not classed otherwise—Unemployed, 570,065; children, 255,145, beggars and paupers, 213, labourers, 8437. Total of Class VII., 833,860. Grand total of females, 838,475.

ETHNICAL DIVISION OF THE PEOPLE.—The people of Purniah District may be divided into two distinct races, whose points of contact follow the line of the old Kúsi river, and are now roughly demarcated by the upper reaches of the Kankái and Mahánandá. To the west of the latter river there is a large Aryan element, whose characteristics of language and physique generally predominate over those of the probably much more numerous non-Aryan people, throughout whom they are diffused. To the east of the Mahánandá, except in the case of evidently immigrant classes, the mass of the people are aborigines, being an outlying tribe of the Koch or Kiránti race. The western or Aryan tract is again divided among Bengalls and Beháris, the former being most numerous towards the

south, and the latter towards the north. It is difficult to determine the exact ethnical distinctions between the sub-tribes; but it is probable that they are derived from the same elements, only mixed in different proportions, the aboriginal or non-Aryan type prevailing most in the case of the Bengalis.

The following list, which is quoted from the District Census Compilation of Mr. Magrath, shows the number of the several tribes and castes of the people found in Purniah District, as returned under the operation of the Census of 1872:—

NAME OF NATIONALITY, TRIBE, OR CASTE.	Number.	NAME OF NATIONALITY, TRIBE, OR CASTE.	Number.
I.—NON-ASIATICS.		2. Semi-Hinduised Aboriginals.	
<i>European—</i>			
English,	99	Bágdí,	85
Irish,	6	Bhar,	318
Scotch,	12	Bahellá,	689
German,	2	Báurí,	3,288
Unspecified,	62	Bhuiyá,	41
		Bind,	7,520
TOTAL OF NON-ASIATICS,	181	Cháin,	4,526
		Chámár,	13,571
II.—MIXED RACES.		Chandál,	4,027
Eurasian,	129	Dom,	3,267
		Dossádh,	26,685
III.—ASIATICS.		Gángsauntá,	36,762
<i>A.—Other than Natives of India and British Bur- mah.</i>		Hári,	37,821
Nepális,	330	Khyen,	69
Syrian,	1	Markandí,	6,561
		Mihthar,	518
Total,	331	Mukiri,	34
		Musáhar,	20,014
<i>B.—Natives of India and British Burmah.</i>		Páliyá,	32,207
I. Aboriginal Tribes.		Rájbansal,	38,793
Bákkho,	32	Pásl,	520
Dhángar,	8,066	Rajwár,	218
Kanjhar,	3,941		
Khárwár,	4,088	Total,	237,534
Kol,	2,489		
Nat,	1,049	3. Hindus.	
Paháryá,	84	(I.) SUPERIOR CASTE.	
Tháru,	45	Bráhmañ,	29,137
Total,	19,794	Rájpút,	23,841
		Ghátwál,	3
		Total,	52,980
		(II.) INTERMEDIATE CASTE.	
		Bábhán,	6,525
		Baidiya,	457

NAME OF NATIONALITY, TRIBE, OR CASTE.	Number.	NAME OF NATIONALITY, TRIBE, OR CASTE.	Number.
(ii.) INTERMEDIATE CASTES —continued.		(vi.) AGRICULTURAL CASTES.	
Bhát,	1,179	Bauri and Tambuli,	8,297
Káyasth,	11,794	Chásá,	200
Klshanpachhi,	39	Kaihartta,	56,321
• Total,	20,054	Kamkár,	70
		Koeri,	24,025
		Kurar,	403
		Kurmi,	5,418
		Máli,	4,663
		Nágar,	2,853
		Kai,	267
		Rájdhub,	1,759
		Sadgop,	11,674
		Total,	115,950
(iii.) TRADING CASTES.		(vii.) CASTES ENGAGED CHIEFLY IN PERSONAL SERVICE.	
Agarwála,	74	Amanth,	7,133
Agráhari,	2	Behára,	169
Balindar,	648	Dhánuk,	39,262
Bangadesiá,	605	Dhobi,	9,049
Baniyá,	19,922	Hajám or Nápit,	18,350
Barnawar,	511	Kahár,	9,519
Gandhabaniya,	5	Total,	83,482
Jaunpuri,	43		
Kainiyá,	12	(viii.) ARTISAN CASTES.	
Kapáriyá,	35	Parháí,	12,702
Kasarwáni,	858	Bhaskar,	4
Kasandhán,	23	Chhipi,	2
Kath Baniyá,	85	Darzi,	39
Khatri,	767	Kaláigar,	19
Máhuri,	255	Kánsári and Thatherá,	5,959
Márwári,	340	Kumbháar,	11,912
Nauniyár,	133	Láheri,	501
Oswál,	56	Lohár,	16,083
Poddár,	3	Sikalgar,	193
Rastogi,	1,222	Sonár,	9,419
Roniyar,	194	Sunri,	18,724
Robi,	15	Teli,	38,701
Sindúriyá,	4,480	Total,	114,258
Subarnabaniya,	21		
Total,	30,369	(ix.) WEAVER CASTES.	
		Chapwál,	8,452
(iv.) PASTORAL CASTES.		Dhuniyá,	110
Gareri,	2,850	Ganesh,	9,669
Goálá,	128,608		
Gujár and Ját,	585		
Total,	132,043		
(v.) CASTES ENGAGED IN PREPARING COOKED FOOD.			
Halwái,	7,889		
Kánda,	4,833		
Total,	12,722		

NAME OF NATIONALITY, TRIBE, OR CASTE.	Number.	NAME OF NATIONALITY, TRIBE, OR CASTE.	Number.
(ix.) WEAVER CASTES— <i>continued.</i>		(xiii.) DANCER, MUSICIAN, BEGGAR, AND VAGA- BOND CASTES.	
Jugí,	4,468	Bhanr,	53
Kapálí,	11	Dhárhí,	1,997
Khatbí,	41	Jagwá,	105
Patuá,	1,039	Kureriyá,	384
Tántí,	34,969	Paikhaj,	10
Tattámá,	3,215	Pawariá,	94
Total,	61,974	Total,	2,643
(x.) LABOURING CASTES.		(xiv.) PERSONS ENUME- RATED BY NATIONALITY ONLY.	
Bátar,	392	Uriyá,	39
Beldár,	7,332	(xv.) PERSONS OF UN- KNOWN OR UNSPECIFIED CASTE,	
Kalar,	115		37,394
Matiyál,	33	GRAND TOTAL OF HINDUS	
Nuniyá,	971		761,077
Pairágh,	156	4. <i>Persons of Hindu origin not recognising Caste.</i>	
Total,	8,999	Aghori,	1,317
(xi.) CASTES ENGAGED IN SELLING FISH AND VEGETABLES.		Atith,	303
Khatik,	72	Vaishnav,	2,554
Túrahá,	734	Kabirpanthí,	5
Total,	806	Nánaksháhi,	106
(xii.) BOATING AND FISH- ING CASTES.		Sanyásí,	1,004
Banpar,	1,337	Sikh,	209
Chábi,	1,245	Suthrásháhi,	10
Gonrhí,	18,125	Native Christians,	92
Jáliá,	7	Total,	5,600
Keut,	20,057	5. <i>Muhammadans.</i>	
Machuá,	1,177	Mughul,	262
Málá,	21,016	Pathán,	5,783
Muriyárl,	3,770	Sayyrl,	7,773
Naiyá,	65	Shaikh,	373,847
Parsat,	155	Unspecified,	302,484
Pod,	554	Total,	690,149
Surahiyá,	1,653	TOTAL OF NATIVES OF INDIA,	
T'ior,	18,203		1,714,154
Total,	87,364	TOTAL OF ASIATICS,	
			1,714,485
		GRAND TOTAL,	
			1,714,795

EMIGRATION AND IMMIGRATION take place to a very limited extent in Purniah District. The register kept in the Magistrate's office, under the Emigration Acts (B.C.) of 1871 and 1873, show only thirty-one emigrants during the last three years (1873 to 1875). In 1873, four men were recruited as coolies for the plantations of Demerara. Of these, one was a Bráhmán, one a Rájput, one a Goálá, and one a Musalmán. They were all young men between twenty-four and twenty-eight years of age, and contracted to serve for five years, being promised a daily wage of eight *ánnds* (1s.), the working hours of the day not to exceed five. The most remarkable fact about this batch of emigrants was, that none of them were natives of Purniah—the Goálá coming from Gházípur in the North-West Provinces, the Rájput and Musalmán from Monghyr, and the Bráhmán from Tirhut. It would seem that they were men who had come to the District in search of labour, and finding the climate too unhealthy, were glad to obtain employment elsewhere. In 1874, twenty-seven persons were recruited for Cachár by a single tea-garden agent. They all came from villages situated within *parganá* Sultánpur, with the exception of two inhabitants of Matiyárl, in *parganá* Havell Purniah; so that they were all inhabitants of the north-west of this District. They were all Hindus of the Pasmán and Amánth castes, with the exception of one Bráhmán. All the males were under thirty years of age, but three of the women were forty-five. One of the latter was accompanied by her three sons, and all the other women went with their husbands. The period of service contracted for was in all cases three years; the monthly wages promised were Rs. 5 (10s.) for men, and Rs. 4 (8s.) for women, with the further stipulation that the owner of the garden would supply rice at the maximum rate of Rs. 1. 8 a *man* of 80 lbs., or 4s. 1d. per cwt.

In 1873 the Collector reported that a large number of labourers annually pass through the north of Purniah District in the beginning of the cold season, on their way from Tirhut, Chhaprá, Gházípur, etc., to Kuch Behar and Rangpur, where there appears to be a great demand for labour. He states that he himself fell in with gangs of Kahárs and others, who told him that they were going to Assam to look out for work as palanquin bearers, etc.; but he never met with any one going as a labourer on a tea-garden. Most of these men return before the rains to their homes by the same route,—Titályá, Krishnaganj, Aráryá, and

Náthpur. Some get employment on the Ganges and Dárjiling road.

HINDU CASTES.—I have not been able to obtain any valuable information regarding the castes of Purniah District, beyond what I have given in my Account of Bhágalpur, when treating of the castes and sub-castes found on the north of the Ganges. The Bráhmaṇ or priestly caste numbers 29,137 persons, or only '02 per cent. of the total Hindu population. They are most numerous along the river Kúśi, being found chiefly in the police circles of Damdahá, Aráriyá, and Rániganj. The Census returns the Rájputs, or military caste, as numbering 23,841; but the fact that they are found in the largest number in the aboriginal tract of Káliáganj makes it probable that this total has been swelled by descendants of the petty Kíránti chiefs. The number of Rájputs in Damdahá and Rániganj is also large. The Bábhans, 6585 in number, form comparatively a small class in Purniah, and are chiefly found in the south and west of the Headquarters Subdivision. The Káyasths, or writer caste, 11,794 in number, are generally distributed over the District, except in the police circle of Káliáganj, where 4109, or more than a third of the whole number, are collected together, being principally employed as traders and *gachbandi* landholders. Amongst trading castes, the Baniyás are the most numerous, spread all over the District, but most numerous in the police circles of Damdahá, Balrámpur, and Krishnaganj. The second largest class of merchants are the Sindúriyás, of whom it is remarkable that 4317, out of a total of 4480, are found in the Headquarters police division, while not one has been returned as residing within the municipality of Purniah. It is probable that the city members of this caste have returned themselves under some more general name.

The Goálás or herdsman caste, 128,608 in number, are the most numerous caste in the District. They are found chiefly in the Headquarters and Aráriyá Subdivisions, forming in the latter tract one-seventh of the total inhabitants, and one-fifth of the Hindu population. Whole villages of Goálás are frequently found on the sandy plains formed by the Kúśi in the west of the District. The principal agricultural caste is the Kaibartta, numbering 56,321, who are found chiefly in the central strip of country running north and south, and which includes the police divisions of Gondwára, Kadbá, Aráriyá, and Amúr-Kásbá. The Koerís, 24,025 in number, are also a large caste, principally congregated around Purniah town

and in the police division of Gondwára. The Sadgops are the chief cultivating class of the Krishnaganj Subdivision; out of 11,674 in the entire District, 9929 are found within this Subdivision. Of the castes engaged in personal service, the Dhánuks, 39,262 in number, are the most numerous. They are found chiefly in two tracts, formed by Gondwára and Kadabá in the south, and Rániganj and Matiyári in the north of the District. The Hajjáms or Nápts, the barber caste, 18,350 in number, are very evenly distributed in all the police circles. Of artisan castes, the oil pressing and oil selling Telis are far the most numerous, especially in the Arariya Subdivision. The weaving castes are less numerous than they once were, but there are still 34,969 Tántís, living chiefly in the police circles of Purniah, Damdahá, Aráryá, and Matiyári, in the west and north-west of the District. Gunny weaving is mostly carried on by Chápwáls, 8452 in number, and Ganeshs, 9669 in number. The former are chiefly met with in Amúr-Kásha and Bahádurganj, and the latter in Bahádurganj and Káhláganj. Owing to the abundance of spare land, the number of day labourers is very small for a Behar District, only 8999 coming under this description, of whom 7332 are Beldárs. The chief boating and fishing castes are the Gonrhis, 18,125 in number, the Keuts, 20,057 in number, the Málás, 21,016 in number; and the Tiors, 18,203 in number. The Gonrhis and Tiors are most numerous in the Headquarters Subdivision, whilst the Keuts prevail in Aráryá, and the Málás in the police circles of Rániganj, Bahádurganj, and Káhláganj. It is remarkable that in the Aráryá Subdivision, the tract in the District which contains fewest streams, the number of fishermen and boatmen is comparatively largest.

THE RELIGIOUS DIVISION OF THE PEOPLE.—The great bulk of the population of Purniah are Hindus, the remainder being Muhammadans, Christians, and hill people professing faiths which are modified forms of Hinduism. The Hindus number 517,679 males and 504,330 females; total, 1,022,009, or 59·6 per cent. of the total population. Proportion of Hindu males in total Hindu population, 50·7 per cent. The Muhammadans number 357,309 males and 332,840 females; total, 690,149, or 40·3 per cent. of the population. Proportion of Muhammadan males in total Muhammadan population, 51·8 per cent. No Buddhists or Jains are found in the District. The Christians number 226 males and 177 females; total, 403. Proportion of males in total Christian population, 56·1 per cent. The remaining portion of the popula-

tion consists of people professing various undefined beliefs, who are classified in the Census Report under the name of 'others.' They consist of 1106 males and 1128 females; total, 2234, or '1 per cent. of the District population. The proportion of males in the whole aboriginal population is 49·5 per cent.

DIVISION OF THE PEOPLE INTO TOWN AND COUNTRY.—The population of Purniah District reside to a very limited extent in towns. There are only three municipal towns—Purniah, Krishnaganj, and Rániganj, containing a total population of 30,691 souls. The urban population has undoubtedly decreased during the past century, a circumstance which will be explained subsequently in the description of Purniah town. The towns do not furnish a larger proportion of the ordinary work of administration than the rural villages, except in so far as the management of municipal concerns requires special supervision.

The Census Report of 1872 thus classifies the villages and towns. There are 1635 villages containing fewer than two hundred inhabitants; 1366 with from two to five hundred inhabitants; 853 with from five hundred to one thousand inhabitants; 273 with from one to two thousand inhabitants; 41 with from two to three thousand inhabitants; 8 with from three to five thousand inhabitants; 2 with from five to ten thousand inhabitants; and 1 with from fifteen to twenty thousand inhabitants; making a total of 4179 villages or townships, with a population varying from two hundred to twenty thousand inhabitants in each. The following is a list of the principal towns and places of interest in the District.

PURNIAH, the chief town and Administrative Headquarters of the District, is situated on the east bank of the river Saurá, in 25° 48' north latitude, and 87° 35' east longitude. The earliest records of the District have been lost, so that the exact date on which the town was formally declared the Headquarters Station cannot now be determined, but it seems to have been somewhere about 1771. I have not found any estimate of the population before that made in 1811 by Dr. Buchanan Hamilton. He states that the *dároga* or head constable of the town calculated that it contained 8234 houses and 32,100 people; but of these, 2698 houses and 9951 people belonged to villages situated entirely in the country, leaving 5536 houses and 22,149 people for the town, which then occupied 'at least nine square miles.' Dr. Buchanan Hamilton adds: 'I am apt to think that the *dároga* has greatly

underrated the population; but however that may be, we must form no idea of the population of Indian towns by comparing them with the extent of cities in Europe. This town, which occupies a space equal to more than half of London, most assuredly does not contain 50,000 people, although it is one of the best country towns in Bengal.' Since that time there seems to have been a very great decline in the population. The area for which at the present day we have accurate census information is that contained within the municipality, whose limits, however, differ very much from those of Purniah town in Dr. Buchanan Hamilton's time. Still, a fair comparison may be made. The old town area remains intact, measuring three miles and a half long by one wide. The old Civil Station of Rámbágh, formerly a western suburb, now lies in the centre of the municipality. The large suburbs towards the north—Miyábazár, Khalífa chak, and part of Abdúllánagar; and on the east, Begam-deurí, parts of Lálbágh and Khúskí/bágh—have been lost; but the still larger space included in the new Civil Station—Madhubaní, Khazáncí-hat, Káliáganj, Raghunáthpur, and Wáítolá—has been added. The area is now not less than 15 square miles. In 1869 the Experimental Census disclosed the following results:—Number of houses, 7572; population, males 5836, females 5272—total, 11,108; average number of souls per house, 1·47. The Regular Census of 1872, however, showed a considerably larger population. The results then ascertained were as follow:—Hindus—males 6004, females, 3641; total, 9645. Muhammadans—males 3551, females 2634; total, 6185. Christians—males 122, females 105; total, 227. Total of all denominations—males 9677, females 6380. Grand total, 16,057.

This marked decrease in the last half-century is probably due to the unhealthiness of the climate, consequent on the silting up and stagnation of the river Kálí Kúsí. Purniah seems to have been chosen as the seat of the Muhammadan Government of the District when this river formed the main bed of the Great Kúsí. As that river worked westward in the manner already described, it gave place to a chain of marshes connected by low strips of land, which were flooded in the rains, and formed at that season of the year a continuous water-communication. About the time of the English occupation, this change seems to have been going on, but was not yet complete. The main body of water had been diverted, but enough still remained in the Kálí Kúsí to keep the swamps deep,

and very little of the bed was left dry for any considerable part of the year. The old records, whilst occasionally mentioning epidemics in the low tract to the south and east, make no reference to the Headquarters town as being remarkably unhealthy. The Saurá, also, was then a larger river than it is at the present day. The space between these two rivers, known as Rámbágh, although not so high as the country farther to the west, where the military lines stood, was chosen as the Civil Station on account of its proximity to the native town, which then lay entirely to the east of the Saurá. A more unfortunate choice could scarcely have been made. The Station became about 1820 one of the most unhealthy in Bengal. A road from the military lines to the Civil Station, in which a sufficient water-way was not allowed, prevented drainage, and added to the prevailing malaria. The old graveyard, situated in one of the gloomiest spots in that neighbourhood, on a narrow tongue of land surrounded by perennial swamps, shows how great must have been the mortality of the European residents during the second quarter of this century. About 1835 it was determined to remove the Government offices to the higher country towards the west; and a site was chosen nearly two miles to the west of the military lines, which had themselves shared to some extent in the general unhealthiness. After this change there was an appreciable improvement in the health of the officials and other residents, but Purniah still continued a very unpopular Station. It scarcely deserves its ill name at the present time, as I am assured by the Civil Surgeon that fever is not common amongst Europeans. The native town of Purniah, however, has remained in its old position, and is still subject to outbreaks of fever which pass into severe epidemics. It is relieved that no less than 70 per cent., and in unhealthy years 90 per cent., of the native population suffer from this disease.

Purniah is a municipality, constituted under Act iii. (B.C.) of 1864. The municipal concerns are managed by a committee of sixteen members, of whom thirteen are non-officials, ten being natives. During the year 1874-75, eight meetings were held. The total municipal income for that year was £3989, 2s. od.; of which £815, 8s. od. was derived from a tax on houses, lands, and buildings; £234, 16s. od. from a tax on horses, carriages, and carts, including fees for their registration; £125, 8s. od. from cattle pounds; £8, 2s. od. from tolls and ferries; £3 from fines levied under the municipal bye-laws; and £2802, 8s. od. from other sources. Of

this latter amount, £2700 formed the result of a public subscription for the rebuilding of the bridge over the Saurá river. The incidence of municipal taxation was 1s. 3½d. per head. The income of 1873-74 had amounted only to £1374, 8s. od.; and the average income of the three preceding years was £1627, 16s. od. The total expenditure for 1874-75 was £1387, 4s. od.; of which £621, 12s. od. was for the maintenance of police; £53, 6s. od. for conservancy; £299, 8s. od. for office establishment; £289, 10s. od. for the repair of roads; £66, 4s. od. for lighting charges; and £57, 4s. od. for miscellaneous expenses. On the 1st April 1875, the large balance of £3135, 18s. od. remained in hand, of which £534 represents accumulations from previous years.

NAWABGANJ is a considerable village situated in *parganá* Kámkjol, in north latitude 25° 28' 55" and east longitude 87° 16' 51", 34 miles distant from Purniah town, and 12 miles from the banks of the Ganges, opposite Sáhibganj. The tradition regarding its foundation is, that on one occasion the treasure, while being sent from Purniah to Rájmahál, the seat of Government in the later Musalmán times, was plundered by a band of robbers near the site of the present village, which was then a waste jungle. The Nawáb was unable to detect the robbers, and in order to protect this route determined to establish a village on the spot. A proclamation was made that any criminals who would settle and live there would be pardoned. People of this description consequently took advantage of such a simple condition of amnesty, and flocked in from all quarters. The village grew to importance, and was called Nawábganj, after its founder. It contains an old fort in ruins, with about an area of 80 acres. At Báldiábárl, about a mile and a half from Nawábganj, was fought the battle between Saukat Jang and Siráj-ud-Daulá, which has been already described. Nawábganj is considered to include the village of Bákhmárá, which lies a mile distant, and contains 330 houses. The whole has been let in farm for five years from 1873 to an indigo planter. The population is estimated at 1500. The following are the chief castes:—(1) Bandelá Kshattriyás; 30 families; immigrants from Bandalkhand, some of whom are well-to-do landholders. (2) Bráhmans; 8. (3) Sunris; 84; shopkeepers. (4) Goálás; 38; cattle owners and herdsmen. (5) Gonrhís; 54; fishermen. (6) Telís; 5; oilmen. (7) Gángauntás; 65; mat and basket makers, etc. There are no public institutions of any kind in this village, except a *páthshálá* or primary school.

BARSOI is situated on the eastern bank of the river Mahánandá, in *parganá* Badaur, in north latitude $25^{\circ} 37' 15''$ and east longitude $87^{\circ} 58' 26''$. It is thirty-four miles distant from Purniah, and eight miles from the Balrámpur police station. It has one of the largest markets in the District, which is held every Wednesday, and is attended largely by people who come from a distance of two or three days' journey. The market is under the direct management of the *samíndárs* of *parganá* Badaur, who reside in Bení Rasalpur. The chief articles of wholesale trade are dried fish (*shútki machh-chya*), tortoises, treacle (*gúr*), country-made cloth, chillies, turmeric, and onions. *Paikárs*, or petty traders, buy up those commodities in considerable quantities, and retail them throughout the District. About 100 cart-loads of dried fish come for sale to the market weekly, and about 150 cart-loads of *gúr*. Some 200 tortoises are also brought for sale. The dried fish comes from police circle Damdahá on the east of the Kúsi, and from Bhágalpur District, and is exported to Rangpur, Dinájpur, Jalpáiguri, the Murang, and Kuch Behar. Many Nepálís engage in this branch of trade as *paikárs*. The *gúr* or treacle comes from the Krishnaganj Subdivision, Rasakhohá in police circle Balrámpur, and Kumárganj and Bochárganj in Dinájpur District. The cloth is brought in from Kálígáon in Maldah, and from Balrámpur and Kadbá police circles in Purniah. All these tracts are inhabited by Momins, Rájbansis, and Tántís, who make coarse cloth. Gunny-bags woven by the Koch people in Balrámpur, and mats manufactured in police circle Krishnaganj, are also largely sold at Barsol market. As a village, Barsol has no importance of any kind. There is a Government pound, and a police outpost has recently been established.

KARAGOLA, a village situated in *parganá* Dharmpur, in $25^{\circ} 24' 30''$ north latitude and $87^{\circ} 26' 55''$ east longitude, is remarkable as the site of one of the largest fairs held in the Lower Provinces. Formerly, when the Ganges flowed at the foot of the Pírpainti hill, this fair was held at the village of that name in Bhágalpur District, on the south of the river. I cannot accurately determine the date of its transfer to the northern or Purniah bank, but it must have been very soon after the commencement of the present century. The fair continued to be held down to 1824 at Kachúá Kol, in *parganá* Chak Diláwari; but during the six following years the site was removed to Mandigorendi, an *istimádrí* estate in *parganá* Dharmpur, owned by a certain Shah Ali Rezá. In 1832 the site was again changed, and until 1843 the

fair was held at Kántánagar, also in Dharmpur, the property of Ma-thuranáth Ghose. In 1844, for the first time, it was held on land belonging to the Mahárájá of Darbhangah, in a village called Bakhiyá Sukháí. In 1851 the site was finally transferred to Kárágolá; and since that year the fair has been regularly held there every February, except in 1874, the year of the Behar scarcity. The Darbhangah estate came under the Court of Wards in 1860. The fair has now become a source of pecuniary interest, and has been leased out to farmers, who exact cesses both in money and in kind. The frequenters of the fair received no advantages to compensate for these charges till about five years ago, when some sanitary arrangements were introduced, which, however, are said to have had the effect of reducing the number of visitors, and shortening the stay of those who came. That some conservancy regulations were necessary seems certain, as this fair has always been a centre of epidemic outbreaks. Since 1870 cholera has twice spread from Kárágolá over the District, with very fatal results.

The fair is held on a large sandy plain, which, during the period of its continuance, is covered with streets of small shops constructed of bamboos and mats. In these shops nearly every article of native domestic use is to be found. There is a very large sale of cloth of every kind, from thick English woollens to fine Dacca muslins. Cotton long-cloths of European and native make, cut into lengths to make *dhúttis* for men or *sáris* for women, are also abundant. These are generally white; but coloured stuffs, principally for *pagris* or head-dresses, are also sold. There is, moreover, a large trade in ploughshares of iron (which come, for the most part, from Monghyr), knives, and razors, the latter usually of English make. Brass and bell-metal cooking utensils are brought in great numbers from Calcutta and Rájsháhí. The southern police divisions of Purniah supply blankets and rugs from near Sáifganj and Kadhá, and reed mats from Balrámpur. Monghyr finds a market here for her ornamental cabinet ware, as well as for commoner sorts of furniture, such as chairs, stools, and tables. Her claystone quarries also supply querns or hand-mills for grinding corn, and *sils* or flat stones on which spices are pounded. Calcutta and some of the large up-country towns send dressed leather, boots, looking-glasses, shawls, Rámpur *chaddars*, silks, and *kinkhadars*. The spice market, which is supplied from Murshidábád and Nadiyá, is generally a large one; but only as much food-grain as is necessary for

the wants of visitors is to be obtained. Lac ornaments and toys are largely sold, being brought from Monghyr and Southern Bírghúm. A few dealers in English hard and fancy ware also attend, to sell umbrellas, matches, soap, paper, candles, buttons, etc.

The attendance of the Nepáls at the Kárágolá fair has been somewhat diminished by the prohibition of the sale of firearms and ammunition. They still visit the fair, however, bringing knives, *kúkrís*, hill canes, *yák* tails, drugs, such as *chireta* and musk, a little coarse lac, and ponies. They also bring a peculiar article of commerce, the carapace of the pangolin or *bajarkít* (*Manis pentadactyla*), with the dried flesh attached, which fetches a high price, as in the opinion of both Bengalís and Beharís it forms the most powerful of aphrodisiacs. In 1876 no native jewellers attended the fair. Tobacco and gunny, the two chief staples of export in Purniah after rice, are not exposed for sale at Kárágolá, except in such trivial quantities as are necessary to meet the demand for the immediate consumption of the frequenters of the fair.

The business done is generally purely retail ; but in some years, when country produce is in much request, and large stocks are in hand, a wholesale trade is developed on the last two or three of the ten days during which the fair is held. In 1876 it was estimated that 40,000 persons in all attended, and the fees levied from shops amounted to £160, a smaller sum than has been obtained in some previous years. The present Manager of the Darbhanga Estate has remitted some of the old cesses, such as those on bullock-carts, and also the mooring dues which were formerly levied on all boats moored on the bank of the Ganges during the fair. The fair is always protected by a considerable body of police, and the Magistrate or Joint-Magistrate of the District is usually present.

Kárágolá is the terminus to which a steamer in connection with the East Indian Railway plies from the station of Sáhíbganj. Of late years, however, a large sandbank has formed in front of the village, on account of which the steamer is obliged to anchor at a point two miles farther down the river. This inconvenience is not felt during the rainy season, from the middle of June to the end of October ; but at other seasons of the year it is the greatest obstacle to a pleasant journey from Calcutta to Dárljling. Kárágolá contains a police outpost, a *ddá* bungalow or staging-inn, and a post office, which is also the chief agency for the Government post carriage

service to Dárjiling. Two or three small native firms of carriage owners are also established here.

BENI RASALPUR, in *parganá* Badaur, in north latitude $25^{\circ} 37' 40''$ and east longitude $87^{\circ} 51' 51''$, six miles distant from the police station of Kadbá, and twenty-six miles from Purniah town, contains the residence of the Muhammadan *samindárs* of the *parganá*. It is the only village in Purniah in which there are many masonry buildings, some of which are two storied. It is situated on the river Kankái, which is formed by the confluence of the Panár and an affluent of the Mahánandá.

SIRNIA is the name of a resumed *milk* or revenue-free estate, situated in *parganá* Katiyár, in $25^{\circ} 29' 10''$ north latitude and $87^{\circ} 38' 51''$ east longitude, which is held by some Gosáins of the Nánaksháhi sect. It was formerly a considerable village, but has lost its importance in consequence of the silting up of the branch of the Kálá Kúsi on which it stands. It is close to Hafáganj, a village containing about 350 houses, mostly inhabited by artisans; and also to Manshá, the residence of the principal indigo planter in the District.

PUTHIA LAKHIRAJ is another large village in *parganá* Dharmpur, situated in north latitude $25^{\circ} 32' 10''$ and east longitude $87^{\circ} 18' 21''$. It was formerly one of the chief centres of the saltpetre and cotton trades, but the changes in the course of the Great Kúsi, which river formerly passed below it, have reduced it to comparative insignificance. It is still a flourishing agricultural village, but the only trade now practised is the manufacture of bracelets.

KASBA, situated in *parganá* Háveli Purniah, in $25^{\circ} 51' 0''$ north latitude and $87^{\circ} 34' 41''$ east longitude, is the largest centre of the rice trade in the District. It is chiefly inhabited by Sunris of Bengali extraction, who collect unhusked rice from the northern *parganás* of Purniah and from the Murang. Their women clean it, after which it is exported to Calcutta. Kásbá lies on the road from Purniah to Aráryá, and is distant about nine miles from the Civil Station, and four from the old city of Purniah. It contains 1479 houses, with a population of 6288 souls. It possesses a large vernacular school attended by 150 pupils, and also a police outpost.

SAIFGANJ, situated in north latitude $25^{\circ} 32' 0''$ and east longitude $87^{\circ} 37' 36''$, in *parganá* Katiyár, was established by the Nawáb Saif Khán about 150 years ago, and is now one of the largest villages in Purniah. It has about 1500 houses, divided into thirty *chaúkis* or

policeman's beats. It is 20 miles distant from the Civil Station, and has a vernacular school, a police outpost, and a Government distillery. It contains seven *pakka* or brick buildings, one of which, the only three-storied house in Purniah, belongs to Rájá Mahendra Náráyan Rái. There are three Muhammadan *masjids* or mosques in the village, one of which is a masonry building; and there is also a Hindu *máth* or temple, erected in 1822 by Rání Lilábatí, aunt of Rájá Mahendra Náráyan Rái. There are two old tanks—one excavated in 1822, and the other about 1807. The population of Sáifganj itself is only 1200; but it is closely surrounded by suburban villages, which bring up the total population to close on 10,000 inhabitants. The following are the prevailing castes of the town:—Bráhmans; consisting of 15 families; mostly petty landowners and priests. Rájputs; 25; farmers and in *samindári* employ. One Káyasth family. Kabirájs; 4; Bengálí immigrants from Maldah. Sunris; 250; traders from different parts of the southern Districts. Shaikh Rákis; 28; come from the District of Gayá, and are distillers of liquor and sellers of *ganjá*, opium, and other excisable articles. Dháníyas; 53; who are cleaners of cotton. Momins; 150; weavers. Shaikhs; 200; farmers, labourers, etc. Goálás; 150; cowherds and sellers of milk. Garerís; 100; blanket makers. Binds, 150; fishermen and ferrymen. Tellís; 75; oil sellers. Baniyas; 15; farmers and petty landholders. Sonárs; 25; goldsmiths. Kánsáris 20; braziers. Thatheras; 5; sellers of brass ornaments. Dhobís; 9; washermen. Banendrás; 80; dealers in rice, etc. Gaurdesi Kaláls; who were said to have numbered 100 families formerly, and to have manufactured spirits, before the Shaikh Rákis came here. Kungrás; 60; sellers of vegetables. Patháns; 10; who are farmers, etc. Tántís; 15; Hindu weavers. Kuroriás; 60; sellers of fuel, etc. Sahesiás; 20; bullock gelders and cow doctors. Láherís; 25; bracelet makers.

The value of the rice exported from Sáifganj may be estimated at two and a half *lákhs* of rupees, or £25,000; and that of mustard-seed at half a *lakh*, or £5000. The number of blankets annually manufactured is about 3000, valued at £600. The following is a list of the imports, which are valued altogether at about £5000:—Wheat, barley, *arhar*, pulse, *kalái*, *matar*, and *khesárl*, from Manihárl in the south. Previous to the construction of the present Ganges and Dárjiling road, the communication between Calcutta and Purniah lay through Sáifganj; and it is said that at that period the

trade of the town was much larger than at present. The river bank opposite Sâhibganj (which the people of Purniah call Kâjrotiâ) is 28 miles from Sâisganj. The rice trade is in the hands of the Bengali Sunris, who buy the rice and bring it in from the outlying villages. Their wives clean it, and it is then exported to Manihâri, Sâhibganj, and other places on the Ganges. Râjâ Mahendra Nârâyan Râi, who is childless, is the only representative of an old race, which will be extinct when he dies. He is the second son of Sri Nârâyan Râi, *zamindâr* of *parganâ* Kadbâ. He and his brother, Rajendra Nârâyan Râi, inherited from their father the ancestral property of Kadbâ, and also obtained by inheritance from their aunt, Râni Indrabati, the *zamindâris* of Katihâr, Kûmâripur, Sripur, and Fathipur-Singhla. The shares of Rajendra Nârâyan Râi were sold by public auction in execution of a Civil Court decree for debt. About 30 years ago, Mahendra Nârâyan disposed of his share in these divisions by private sale to a European for £4500. The residence of this family was formerly at Sariâ, 6 miles distant, but Mahendra Nârâyan, about 1838, removed to Sâisganj. He belongs to a high-caste Mithila Brâhman family from Tirhut, called Soti. The leading Muhammadans in Sâisganj belong to the Shiâ sect, and celebrate the *Muharram* with great display.

KRISHNAGANJ, the headquarters town of the Subdivision of the same name, is situated in *parganâ* Sûrjâpur, near the small river Râmjan, in $26^{\circ} 7' 26''$ north latitude and $87^{\circ} 58' 14''$ east longitude. It forms a half-way station on the Ganges and Dârjiling road. Krishnaganj was one of the places of which the population was enumerated at the time of the Experimental Census of 1869, with the following results:—Number of houses, 2231; population, males 1910, females 1763; total, 3673; average number of inmates per house, 1.65. In 1872 the regular Census showed a population more than twice as large, viz. males 4351, females 4139; total, 8490. The Subdivisional Magistrate's offices are situated four miles north-west of the town, at a place known as Bhâliyâdângi, about half a mile from the east bank of the Mahânandâ, where there is also a *Munsifi* or civil court, a sub-registry office, a school, and a charitable dispensary. The post office, coaching bungalow, and police station are at Krishnaganj, which forms a *châukdâri* union under Act xx. of 1856, and is managed by a municipal committee of seventeen non-official native members. During the year 1874-75, £403, 8s. od. was realized as a house-tax, at the rate of 8 *dands* (12.) per head of

the municipal population ; of which £278, 18s. od. was expended on police, £29, 14s. od. on office establishments, £67, 10s. od. on roads, and £1, 10s. od. on buildings. At the close of the year there was a balance in hand of £188, 14s. od., of which £142, 18s. od. represented accumulations from previous years.

RANIGANJ is a small municipal town situated on the river Kamlá, in *parganá* Háveli Purniah, in $26^{\circ} 4' 0''$ north latitude and $87^{\circ} 15' 51''$ east longitude. It stands on the high road from Khajlî *ghát* on the Kúsi to the Headquarters town, from which last it is distant thirty miles. For administrative purposes it lies within the Aráriyá Sub-division ; and it is sixteen miles due west from Basantpur, the Sub-divisional headquarters. The population of the hamlets contained within municipal limits is 3024 males and 3120 females ; but the total inhabitants of Rániganj itself number only 1498 souls. The municipality is a *chaukidári* union established under Act xx. of 1856. In 1874-75 its affairs were managed by a committee of three non-official native members. During that year the house-tax, at the rate of 4d. per head of the municipal population, realized £105, 2s. od.; and there was at the beginning of that period a balance in hand from previous years of £16, 10s. od. The average income of the three preceding years had been £88, 16s. od. The total expenditure in 1874-75 was £89, of which £75, 8s. od. was devoted to the maintenance of police, and £13, 12s. od. to the office establishments of the union. The balance in hand on the 1st April 1875 was £32, 12s. od. The municipal police force consists of twelve men ; and in addition to these, there are stationed in the town for the protection of the surrounding Subdivision, 1 sub-inspector, 1 head constable, and 11 constables. Rániganj contains a primary school, attended by 50 boys, whose teacher receives a stipend of Rs. 5 (10s.) a month from Government, besides local fees.

ARARIYA is a large village situated in *parganá* Sultánpur, in $26^{\circ} 9' 15''$ north latitude and $87^{\circ} 32' 56''$ east longitude, on the left bank of the Panár, thirty miles north of Purniah town and four miles east of Basantpur. It contains 311 houses, and a population numbering 1498. It formerly contained a *Munsif's* court and a police station, and also gave its name to the criminal court subsequently established in the village of Turkell. These offices, together with a lock-up and excise stores, have now been removed to Basantpur, on the right bank of the Panár. Aráriyá has two schools, a middle-class vernacular and a primary school, in which

Hindu is taught in both the Deva-Nágarí and Hindí-Káithí characters.

SAIFGANJ PIRWAHA is a large village in *parganá* Háveli Purniah, in $26^{\circ} 13' 55''$ north latitude and $87^{\circ} 15' 51''$ east longitude, thirty-eight miles distant from Purniah and sixteen from Basantpur. It contains 109 houses, with 709 inhabitants, and lies within the *zamín-dárá* of Rái Lakshmi-pat Sinh. It possesses a middle-class vernacular aided school, attended by 30 boys.

DHOLBAJA is a considerable village of *parganá* Sultánpur, situated in $26^{\circ} 16' 0''$ north latitude and $87^{\circ} 19' 21''$ east longitude, on the Matiyárá road, forty miles distant from Purniah and sixteen from Basantpur. It contains 683 houses, with 1784 inhabitants. The primary school is attended by about 50 boys.

RUINS OF OLD FORTS are met with in many parts of the District. The remains of three large ones in the Krishnaganj Subdivision bear the names Benúgarh, Barijágarh, and Asurgarh. Portions of walls and foundations attest the fact that forts once existed, but their history is involved in obscurity. There are ample materials for archæological researches, as rocks and portions of pillars with figures and inscriptions are to be seen lying about the sites. The story locally current as to the origin of these forts is that there were five brothers, Benu, Bariján, Asura, Nanha, and Kanha, who each built a *garh* or fortified residence, and named it after himself. The forts of Nanha and Kanha are pointed out, but are scarcely traceable. Dr. Buchanan Hamilton states that these brothers were generally represented to be Domkata Bráhmans. There are tanks inside the enclosures; and the most absurd stories are told, and implicitly believed in by the villagers, in connection with the tank at Bariján, known as Dák-pakhar. One of the least extravagant of these stories is, that the earth of the tank, if taken near any other tank, has the power of immediately drawing forth from it all the fish it contains. The five brothers are said to have lived in the Vikramáditya period, that is to say, about 57 B.C.; and the forts, it is added, were all built in a night. At Thákurganj, in the northern part of the District, and west of Káliáganj, stones with inscriptions were dug up by the Great Trigonometrical Surveyors several years ago, when the triangulation of the District was being effected. They were said to mark the site of the chief residence of a Rájá Virát, whose territory lay along the east of the Kúsi, and included the country round about as far as Rangpur and Dinájpur. Of this Rájá Virát, it is

related that he gave shelter to Yudisthira and his four brothers, the chiefs of the Pandavas, during their twelve years' exile, after they had been driven out of Hastinapur by the Kauravas, the other branch of the lunar race.

Asurgarh is about four miles from Dulálganj, a little east of the Mahánandá, and covers a space of irregular form, about 1200 yards in circumference. It rises suddenly from the surrounding plain to a height of 10 or 12 feet, and appears to be the earthen rampart of a fort; but there is no hollow space within. It is not a natural elevation, however, but is formed of the debris of many buildings, the lower chambers of which are still sometimes found under the surface. The people on the spot state that some hundred years ago the place was covered with trees; and that no Hindu would venture to live on it, lest Asur Deo should be offended. At length a holy Musalmán came, and, killing a cow, took possession, which his descendants retain. They have cleared and cultivated the whole place, and enjoy considerable reputation. Hindus come occasionally and make offerings to Asur Deo. The Muhammadans, on the other hand, venerate the intrepid saint by whom the ruin was cleared; and about 1500 of the faithful assemble, after the fair of Nekmard, in Dinájpur, to celebrate his memory.

VILLAGE INSTITUTIONS, although they still exist in Purniah District, are much less influential than was formerly the case. They may be classified under two main heads, the revenue-collecting and supervising agency, and the communal agency. The former had its origin in the times of the Mughul administration, and was then represented by two officials, the *kánúngo* and the *patwári*, the institution of both which officers is popularly ascribed to Todar Mal, the great financier, of the Emperor Akbar.

KANUNGOS.—The *kánúngo's* office was beginning to decline in importance, even before the period of English ascendancy. In my Account of Bhagalpur I have given a detailed description of this important post and its duties. Its decline in Purniah is thus described by the Collector, Mr. Heatly, in a Report which he submitted in 1790 to the Board of Revenue:—‘In several *parganá's* the *kánúngú* is united to the *samindári*, and becomes totally useless as a separate office. Most of the other *kánúngos* labour under some incapacity; and even those who are competent to the duties seldom act, but for the most part leave the office to the management of their *gumáshtás*. Thus circumstanced, the *kánúngú*

does not answer the objects of its institution, namely, to check oppressions and frauds and innovations, for which purpose the *kánúngos* were required to keep journals of daily receipts and occurrences, to record the general and detailed accounts of the *parganá*, to register the established customs and standing orders, and generally authenticate and record all transactions and matters relative to the revenue.' Mr. Heatly further pointed out that the *kánúngos* had ceased to be independent officers of Government, as they and their assistants held farms under the *zamíndár*, and were consequently very liable to be influenced by him. The office of *kánúngo* was substantially abolished by the Permanent Settlement.

PATWARIS.—The *patwári* was an inferior subordinate of the *kánúngo*. The office has been maintained up to the present time, and the *patwári* still records facts relative to the village and its cultivation; but, for want of any other superior, he has become a mere servant of the landlord. For many years, the *zamíndár* submitted to the Collector for approval the nomination roll of the *patwáris*, and a register of the names of *patwáris* so appointed from 1830 to 1849 is preserved in the Collectorate. This practice, which had fallen into disuse since 1849, was renewed in 1873-74.

The following figures show the number of villages in each *parganá* according to the Revenue Survey, and the number of *patwáris* registered up to 1849 and in 1873-74:—Asjá, with 279 villages; 41 *patwáris* registered from 1830 to 1849, and 42 in 1873-74. Badaur, with 682 villages; 86 *patwáris* registered from 1830 to 1849, and 37 in 1873-74. Burigangal, with fifteen villages; 2 *patwáris* registered from 1830 to 1849, and 2 in 1873-74. Bhaurá, with 1 village and no *patwári*. Tájpur, with 389 villages; 30 *patwáris* registered from 1830 to 1849, and 34 in 1873-74. Háveli, with 603 villages; 213 *patwáris* registered from 1830 to 1849, and 186 in 1873-74. Diláwarpur, with 77 villages; 3 *patwáris* registered from 1830 to 1849, and none in 1873-74. Kánkjol, with 363 villages; 15 *patwáris* registered from 1830-1849, and 28 in 1873-74. Kumáripur, with 59 villages, and 6 *patwáris* registered in 1873-74. Katiyár, with 77 villages; 35 *patwáris* registered from 1830 to 1849, and 15 in 1873-74. Kadbá, with 290 villages; 30 *patwáris* registered from 1830 to 1849, and 42 in 1873-74. Garhí, with 40 villages; 1 *patwári* registered from 1830 to 1849, and 5 in 1873-74. Gográ, with 36 villages; 1 *patwári* registered from 1830-1849, and 3 in

1873-74. Maldawár, with 38 villages; 2 *patwáris* registered from 1830-49, and 3 in 1873-74. Hatandá, with 203 villages, and no *patwári*. Dharpur, with 992 villages; 226 *patwáris* registered from 1830 to 1849, and 190 in 1873-74. Chak Diláwarí, with 43 villages and no *patwáris*. Kholrá, with 12 villages, and 3 *patwáris* registered in 1873-74. Kásimpur, with 33 villages and no *patwáris*. Sultánpur, with 224 villages; 51 *patwáris* registered from 1830 to 1849, and 61 in 1873-74. Pawákhálí, with 147 villages; 27 *patwáris* registered from 1830 to 1849, and 28 in 1873-74. Srípur, with 439 villages; 102 *patwáris* registered from 1830 to 1849, and 90 in 1873-74. Fathipur Singhlá, with 165 villages; 48 *patwáris* registered from 1830 to 1849, and 42 in 1873-74. Súrjyapur, with 891 villages; 120 *patwáris* registered from 1830 to 1849, and 80 in 1873-74. Terákhardá, with 75 villages; 8 *patwáris* registered from 1830 to 1849, and 13 in 1873-74. Sháhpur, with 5 villages and 2 *patwáris* registered from 1830 to 1849. When it is remembered that the Census returns have shown a large increase in the number of villages since the Survey, it is evident that the registration, at all times incomplete, was particularly so in 1873-74.

Each *patwári* has charge of a *mahál*, consisting of a village or a group of villages, locally called a *táluk*. The office is not hereditary. The proper duty of a *patwári* is to keep the accounts or *hisdáb* of the village or villages to which he is appointed. To this work is now generally added that of collecting the rents. This is properly the function of the *srímán*, who formerly made the collection, but when the *patwári* became a subordinate of the landholder, both duties were, from motives of economy, entrusted to one servant. He has to enter in an account-book, called *siah*, all sums received and disbursed on account of the *mahál*, to sign receipts for rents, to

prepare the *haslobúd* (gross receipts), *jamá wasil báki* (receipts and balances), and other annual accounts, and to submit whatever returns are called for by the Collector. He is also empowered to give acquittances, *farakh* or *farkhat*, to tenants when their whole rent is paid. The *siah* is the day-book of the village. It shows all sums received and disbursed, whether customary or incidental. On being appointed, the *patwári* pays a *nazaráná* to the *samíndár*, the amount of which varies according to the extent of the tract under him, and the payment of which gives him a right to claim *páiya*, or one pice per rupee ($1\frac{0}{16}$ per cent. of the total rent), which the tenantry pay him on their receiving the *farakh*. There are

two kinds of *patwáris* in this District; one is called *collector's bahálli patwári*—that is, a *patwári* appointed with the approval of the Collector. The other is called *anjámkar patwári*, who is appointed by the *samíndár* temporarily. He gets no *sanad* of permanent appointment, and is not entitled to the *páiya*, nor does he pay any *nazaránd*. The status of a *patwári* of the former class is, of course, the higher of the two. A *patwári* sometimes appoints a *ndíb*, who does the work on his behalf. The practice with regard to remuneration from the landlord varies in different *parganá*s. In some, he is paid at the rate of one *ánná* in the rupee, or $6\frac{1}{4}$ per cent. on the collections of every year; in others, $4\frac{1}{2}$ per cent. on the total rental, out of which he has to pay Rs. 1. 8 a month, or Rs. 18 = £1, 16s. od. a year, to the village *mandal* or *goráit*. Again, in some *parganá*s he receives a fixed monthly wage, varying from Rs. 2 or 4s., to Rs. 12 or £1, 4s. od.; and in others, where he is in charge of a small village, a yearly salary, called *sáliána*, of six or seven rupees (12s. or 14s.). The *páiya* which the *patwári* gets from the tenants is in addition to the remuneration he receives from the landlord. When the post of a *patwári* becomes vacant by death, resignation, or other cause, the *samíndár* appoints his successor and fixes the salary to be paid, which may be either at the rate customary in the *parganá* or village, or at a new rate agreed upon with the candidate for the office. Even when a village is sublet in *patní* or on lease, the *samíndár* reserves to himself the right of appointing and removing the *patwári*, who is, however, paid by the *patnídár* or the *mustájlir*, as the case may be. It has been suggested that the *patwáris* might be required to keep registers of births, deaths, and marriages in their jurisdictions, and to submit monthly returns to the Collector. And this seems a work which they would be well able to perform.

THE *SRIMAN* is collector of the rents of a village or small group of villages, and has generally to collect an amount varying from £40 to £100 a year. The *srímán* is appointed by the landlord or his manager, and is paid a monthly salary varying from Rs. 4 to Rs. 8 = 8s. to 16s., and sometimes by a percentage on the collections. If the functions of a *srímán* and *patwári* are united in one person, the salary is higher than when they are separated. In *parganá* Sultánpur the term *mukaddam* is used instead of *srímán*. The title *tahsildár* is applied to an officer who has the management of an entire *parganá*, or a very large area. A *tahsildár*, therefore, has many subordinate

srimáns, who remit the collections to him. The salary of a *tahsildár* varies from £1 to £3 a month. *Srimáns* have to furnish security, unless exempted for some special reason from doing so.

THE MANDAL or village head-man of Eastern Bengal is in Purniah a *zamindári* underling. His duties are to assist the *srimán* or *patwári* in the collection of the rents, and in the settlement of boundary disputes. He is always a resident of the village to which he is appointed, and receives monthly wages, varying from Rs. 2 to Rs. 4 = 4s. to 8s. On the death of a *mandal*, if his son is of fit age he is generally selected to succeed to the post; and in some *parganáds* the office of *mandal* is distinctly hereditary in a certain family. In Dharmpur there are no such village officials. *Mandals* are usually selected from the Dhánuk, Goálá, Kurmí, and Koerí castes, or they may be Muhammadans. When a *patwári* or *srimán* has a small jurisdiction or *tahsil*, the office of *mandal* is sometimes dispensed with, the *patwári* in such a case being assisted by the *taináth* or *goráit*.

TAINATH AND GORAIT.—The *taináth* is a messenger attached to the *patwári* or *srimán*. His duties are to summon the tenants before these officials to pay rent, or account for the non-payment. He is paid a monthly salary of Rs. 2 to Rs. 4, or 4s. to 8s. People of all castes, even Bráhmans, serve as *taináths*. In every village there is also a *goráit*, or kind of village watchman, on behalf of the landholder, who is remunerated either by a grant of *chákrán* or *jágir* land, varying in extent from 2 to 30 *bighás*, or by a monthly salary of from 8 *ánnás* (1s.) to 2 Rs. (4s.). The office of *goráit* is generally hereditary. Like the *mandal*, he is a resident of the village in which he serves. The Hári and Dosádh castes supply the greater number of *goráits*. When not employed on their special duties as guards or watchmen in the managing office, they attend the *srimáns* or *patwáris* with their papers and accounts from place to place, and summon the tenantry. The position of the *taináth* is higher than that of the *goráit*. The term *pdik* is used for both these officials in *pargands* Badaur, Tájpur, Hatandá, Kánkjol, and Kadbá.

THE COMMUNAL AGENCY is but poorly represented by the *jeth rayat* and the *chaukidár*. The former is, throughout the greater part of the District, the village head-man. His office is practically elective, although not formally so. The title is in many cases passed on from father to son; but if the position is not maintained, it is but an empty name, and new rising men become the recognised leaders of the community. The *jeth rayat's* reward is his influence and the rank

assigned to him in village feasts. He also receives, on such festive occasions as births, marriages, and harvest homes, little complimentary presents. The *chaukidár* is to be found in every village, and is generally of the Hári or Dosádh caste. He is paid by the villagers, his salary varying from R. 1 (2s.) to Rs. 3 (6s.) a month. His duties are too well known to need any description. At the present time, *chaukidárs* are appointed by the District Superintendent of police, on the nomination of the villagers.

THE PARAMANIK is the head-man amongst the lower classes, not only of Hindus but of Musalmáns, in the east of Purniah District. He decides questions affecting caste and other social matters, and receives in return presents of grain, clothes, and occasionally money. Amongst some of the lowest castes, such as Kochs, Páliyás, Doms, and Hárís, he performs many of the religious rites of the people, and in a manner takes the place of the *purohit* or village priest. His influence is relatively greater than that of any other kind of head-man.

KAZIS are still met with in Krishnaganj and Aráriyá, and also in parts of the Headquarters Subdivision. They attend at marriages among the respectable classes of Muhammadans. Among the lower classes, any one who can read or recite a passage from the Kurán is called a *mullá*; he celebrates marriages and is remunerated by fees.

DRESS.—The hot-weather dress of the better class of Hindus, when in their houses, consists only of a *dhúti*, a piece of fine muslin about twelve feet long by three feet wide, worn round the loins and falling to the knee, with one end passed between the legs and fastened in at the waist behind. When they go out, a *chapkan*, or long, close-fitting cotton robe, reaching to the knee, buttoned on the right shoulder, and a *pagrí*, or round, flat head-dress, are worn in addition to the *dhúti*; also a pair of shoes or slippers, the *khardún* or wooden sandals being reserved for home use. A light, wavy, fine muslin cloth, or *chádar*, is also thrown over the shoulders. In the cold weather, a *mirzáj*, or waistcoat with long sleeves, is worn under the *chapkan*; and over all there is a wrap called a *báldposh*, made either of coloured cloth or satin, padded with cotton. Stockings are very seldom used. The turban or *pagrí* of a Bráhman differs from that worn by the other castes of Hindus in having a peak in front, and when made of folded cloth the last fold is carried to the left of the head. Rich landed proprietors generally have

adopted, for use in public, the dress of Musalmáns of the higher classes, wearing *paijamas* and *chogás*. Hindu females of the higher class wear a *sári*, or piece of muslin fifteen to eighteen feet long, which is wound round the waist and allowed to fall below the ankle on one leg, while a portion of the other leg is exposed, the upper end being passed round the shoulders and over the head like a veil. Bráhmaṇ women tie the knot or *konch* of the *sári* in front, while the Káyasths and other Súdras fasten it on the left side. All respectable Hindu ladies, except Bráhmans, occasionally wear the *ghugrá*, a kind of petticoat made of satin or silk, and reaching to the ankles; over which a *dopatá*, or embroidered silk scarf seven to nine feet in length, covers the upper part of the body. Women of advanced age and widows do not wear the *ghugrá*. *Sindúr* (minium) or vermillion is much used by Hindu women on the forehead and the crown of the head, but widows and unmarried girls are not permitted to apply it. The following are the gold and silver ornaments used amongst women of the better class:—*Báñ*, a small earring, and *jhúmka*, a pendant earring; *báñ*, *poinchi*, *kāngan*, *chúri*, bracelets and armlets of different kinds; a necklace, called *stámála*; *panch-lahri*, or a fivefold chain hanging over the breast; *kāntmála*, a close-fitting necklet; and *karás* or anklets. Besides these, rings are also worn on the fingers. Widows are prohibited the use of ornaments of any kind.

The ordinary dress of a well-to-do shopkeeper is also a *dhútt*. In public, or on any special occasion, a substantial *chádar* is worn over the shoulders; some wear a *mirzái* under the *chádar*, and a piece of coarse muslin tied round the head for a turban. Shoes are rarely worn, the *kharáún* taking their place. In the cold weather, a *dohar*, or heavy cotton sheet, is worn above the *dhútt* during the day, and at night a *rasdi*, or quilt of country cloth. The females wear *sáris* similar to those used by the upper classes, but not so fine, and less ample. The ornaments most used by middle-class women are:—*Hānsās*, worn round the neck; *chúris* and *bāsúbands*, for the arms. Young women are permitted to use coloured *sáris* on festive occasions and at marriage ceremonies. The semi-Hinduized aboriginal tribes, such as Chapwáls, Páliyás, Kochs, and Gonrhís, who form the lowest order amongst the Hindus, dress very scantily. A piece of cloth called *langútt*, worn something after the fashion of a *dhútt*, but much shorter and narrower, is hardly sufficient for decency. The *dhútt*, if possessed by any, is laid by to be worn

on holidays. During winter they wrap themselves in a coarse kind of country blanket. The women wear country-made *sárls*, which they never change for new till they are worn out and fall to pieces. In the whole of the Krishnaganj Subdivision, part of Aráriyá, and the Balrámpur police circle of the Headquarters Subdivision, the women wear a dress called a *búki*, *kaupa*, or *tenga*, consisting of a piece of cloth measuring from seven to nine feet in length and four feet wide. It is passed under the arms and the corners are tied above the bosom. It is closed in front by being lapped over and fastened in under the left arm. The only ornaments used by those who can afford any are *chúrls* or wristlets, made of *kánsá* or bell-metal, and *bálls* or earrings of silver.

Muhammadans of the highest class wear *paijámás* or drawers, and a *chapkan* and cap when at home. The *paijámás* are generally made of long-cloth, and the *chapkan* of fine muslin. Caps are made of various patterns. *Páñchpallá* or *goltopts* are of velvet, made after the Calcutta fashion, and generally with gold lace on the sides; or they are white, and of Dehli make, with needlework embroidery. *Kishtinamá* or *dopallá* caps were formerly in vogue, but at present they are only used by old men. The *chapkans* of the Muhammadans differ from those of the Hindus, being fastened on the left shoulder. Formerly, *jamás* were the ordinary out-of-door dress of both respectable Hindus and Muhammadans, but they are used now only by old people who do not care to follow the new fashions, and at the time of marriage. On special occasions, satin *paijámás*, silk or *chínápat chapkans*, *kinkháb kabás*, with loose sleeves, and shawls and *kinkháb chogás* are worn. The *chogá* is a loose coat falling to the knee, and closed only at the neck. When respectable Musalmáns visit Europeans, they generally wear *pagrls* called *amámahs*. Old Muhammadan gentlemen wear *abás* of broadcloth, and not of *kinkháb*, as young men do. The *abás* are flowing overcoats fastened by a single button on the breast. They often also wear *pírdáns*, a loose shirt-like garment, above the *paijámás* instead of a *chapkan*. Both young and old wear stockings of European make. Formerly they used to wear *paitábas* or coarse foot-socks. During the cold weather, both young and old wrap a shawl or *bállposh* over the *chapkan* or *pírdán*, the latter being preferred by the old. They wear Dehli-made *nágara* or shoes, sandals being very seldom used by men of position. When visiting Europeans, they generally wear English shoes with buckles. Young men, however, are still very

partial to *nágara* shoes made in Benáres after the Dehli fashion, but it is not considered good manners to wear them inside a house. At night they wear *lúngís* or *tahbands*, and take off their *paijámás*. Muhammadan ladies wear *sáris*, generally in the same way as the Bráhmaṇ women do. Under these they wear a *kúrtá*, or jacket reaching to the waist with long sleeves. Formerly they used *kúrtás* with short sleeves. In Purniah, ladies do not wear the *ángiyá* or bodice. *Kúrtás* are loose, and have one button at the throat. The *ángiyá* is tight, and is laced behind.

— A lady of rank on special occasions wears a gown, *peswáj*, which reaches from the neck to the feet, and has sleeves. It is made of fine muslin, bordered with gold or silver lace. A veil of one breadth of cloth, six cubits long by three wide, or *ekpattá*, made of fine muslin, edged with gold or silver lace; a pair of long drawers. *surwar*, which are tied at the waist like those of men, but are exceedingly narrow at the ankle; and slippers with long-pointed toes, covered with gold and silver embroidery, complete the costume.

Middle-class Musalmán men and women dress in the same kind of clothes as the above, but made of less valuable materials. Men of the lower classes, such as labourers, wear *dhútís* and *langútís* like low-class Hindus, and the women *búkís*; the only difference with the latter being that the *chúrís* or wristlets worn by Musalmán women are usually made of lac mixed with clay.

THE DWELLINGS of the people may be divided into five distinct kinds, each tenanted by a certain class of the population.

The lowest class, the *barihars* or day-labourers, build their houses with a bamboo framework, walled in with mats made of reeds, and thatched with *úlú* grass. Such houses consist of a single room, measuring from 10 feet to 12 feet in length, and from 6 feet to 8 feet wide, having a pent roof called a *do-chhaprá* or *lokái*. The ends of the house are perpendicular, the walls running up to the apex of the roof, which does not incline in these directions. They have no windows, and the only means of entrance is a doorway closed by a loose mat formed of grass, secured with strips of bamboo. The walls are plastered on the inside with clay. A house of this description costs in all from Rs. 3 to Rs. 4, or 6s. to 8s.

The houses built by the *grihásts*, or small farmers, are a little better and more commodious than the foregoing. They are from 15 to 18 feet long, and from 9 to 10 feet broad, the uprights of the roof being made of *sál* (*Shorea robusta*). They are known as *banglás*, which

differ somewhat from the *do-chhaprá* in shape, the ridge of the roof being slightly curved instead of straight. The walls are constructed of slips of bamboo, binding together thatching grass plastered over with clay. The house is usually surrounded by a yard confined by walls formed of the same materials. The female members of the family reside in this area, to which strangers are denied admission. Outside its limits is constructed a second hut, or *do-chhaprá*, the walls of which are unplastered. It is called a *godli* or cow-shed. Here the men pass much of their leisure time, and at night the cattle are kept in it, and the boys of the family sleep there. Close by the *godli* another building is made, which is known as the *báita-khánda*, and here visitors are received. It consists merely of a roof supported either by *sál* or bamboo posts, the sides being left entirely open, and there being no walls or doors.

Farmers of the better class, called *málgusdrs*, have several houses of the *do-chhaprá* or *banglá* kind, within an enclosure, entirely set aside for their wives or female relatives. The house occupied by the male members of the family is called a *chaudrí*, and is a square-built cottage. The roof is formed of *chhapars* of a triangular shape, the base of each resting on a side wall, and the upper angles being joined together at the top. In this kind of house there is a *takhtaposh* or wooden platform, covered over either with mats or blankets; and a few *khatás* or bedsteads, rough frameworks supporting a coarse netting. Other huts and *do-chhaprá*s are built as out-offices, and for the accommodation of cattle. The *dhdwa* is another kind of cottage, inhabited by the better class of tenantry. It is formed of clay spread on bamboo mats, supported on *sál*-wood uprights. It is chiefly intended for the protection of property in case of fire, and is used as a storehouse.

Mustájjirs and *patnidárs*, and other small landholders, build *chaudris* for the accommodation of their females. The fence surrounding the family enclosure is usually made of bamboo matting plastered over with clay, but the few who can afford to do so build brick walls. A short distance from this *zanánda-khánda*, or women's-house, another *chaudrí* of larger dimensions, with from four to five doors, is erected. Its clay-plastered walls are often white-washed with lime. Here the master of the house has his office, and spends most of his time. The *takhtaposh*, in houses of this description, is covered with a *satranji* or carpet, over which a white or figured cotton sheet is often spread. A few chairs are also kept

in it, but seldom come into requisition except for the reception of a European. Out-houses of the same kind, or *do-chhaprās*, but on a smaller scale, are built as storehouses, and for the use of servants and cattle. Wooden doors are not, as a rule, found in *chauāris*. The cost of these buildings varies according to their size, and the materials of which they are constructed. If *sāl* beams and posts are used, and the walls are made of bamboo matting and clay, the cost ranges between £15 and £25; but if the walls are of brick and mud, the expense is as high as £50 or £60.

Larger landed proprietors or *samindārs*, who are not numerous in the District of Purniah, live in masonry houses called *deūris*, built in a style common in the East, but on a small scale. The *sandānā*, a square-built, flat-roofed house, is enclosed within high brick walls. In front of it, another large oblong building is constructed, in which are the business apartments. The floor is covered with a *farash*, a kind of figured floor-cloth, and on a portion of this is spread a *satranjī*, or carpet, covered with a white sheet. A number of large pillows and bolsters are placed on this sheet for the convenience of visitors, who recline on them, the proprietors occupying a cushion called a *kalin*. It has become the fashion to fit up the best room of the house in the English style, with sofas, arm-chairs, mirrors, and pictures. This room is reserved for the reception of European gentlemen.

FOOD OF THE PEOPLE.—Hindus of the highest class ordinarily eat *pūris* and *bhājīs*, rice and pulses. *Pūris* are made of flour mixed with water, forming unleavened bread, which is kneaded into very thin cakes and fried in *ghī* or clarified butter. *Bhājīs* are vegetable dishes formed of potatoes, *bāiguns*, and greens of sorts, similarly fried. Wheaten flour and *kalāī* pulse, mixed together and prepared like *pūris*, are called *kācharis*. Pigeons and the flesh of young goats are also eaten; but milk, curds, and sweetmeats of various kinds are considered the most dainty food. Middle-class Hindus eat pulses and rice with vegetable curry. On special occasions they make *pūris*, as the higher classes do. They eat fish when cheap. Fish is not so much eaten, however, by the Hindus of this District as by those of Lower Bengal. Low-class Hindus generally eat rice and *dāl*, and greens, called *patuā* or *lāṣa*. On festive occasions they use *dahl*, *chūrā*, a preparation of rice, and burnt molasses or *gūr*.

The usual diet of the higher class of Muhammadans in Purniah is rice and curry made of fowls, highly seasoned with spices.

They generally breakfast at about 10 or 11 A.M., and dine at about 8 or 9 P.M. A few of them take a light meal in the morning, which they call *ndshid*. Curds is a favourite article of food both with the poor and the rich. They mix it with rice and add a small quantity of salt. Curry is made of meat which has been well washed with water, and then placed for a time in curds. To cook one pound of meat they place four ounces of *ghi* in a sauce-pan, and when the *ghi* is melted, spices are added. After a time, the meat with the curds is put in, together with a few sliced onions. The whole is then allowed to simmer on the hearth for a short time, after which the curry is ready for use. The diet of middle-class Musalmáns is very similar to that of Hindus of the same position. A favourite vegetable dish amongst them, called *tarst*, is prepared from greens flavoured with *ámchur*, or unripe mangoes dried in the sun. Young buffaloes, called *pánras* in this District, are in much demand for food. Both Hindus and Musalmáns of the lowest class make a kind of tea, by adding boiling water to the dried leaves of the *patuá* plant. They drink it chiefly in the cold weather, and flavour it with salt or burnt sugar.

AMUSEMENTS.—The most general amusement amongst the people of Purniah is derived from cards, packs of which are cheap and plentiful in every *bazár*. The four favourite games are *dák brúj*, a game much like whist; *bibi dharádhari*, a kind of Old Bachelor, except that the interest of the game centres in the queen instead of the knave; *nakshumár*, or pips, a purely gambling game; and *rangmár*, the native substitute for bezique, which is played by men and women of the better classes. In *dák brúj*, which is played by three persons, the pack of 52 is first reduced in number by one, so that 17 cards may be dealt to each player. The pack is then cut, the lowest card of the cut being the *rang* (= colour) or trump, a manner of deciding the trump less open to manipulation than that in use amongst Europeans. The play begins with the person on the right of the dealer. The ace is the best card, and the winner of the greatest number of tricks does not thereby win the game, but only obtains the *dák* or call. The cards are taken up, shuffled, and again dealt out. If, in the first round,—let us suppose,—A has won 10 tricks or 30 cards, B 4 tricks or 12 cards, and C 3 tricks or 9 cards, the *dák* is thus effected. After the second deal A takes up his 17 cards and demands 5 cards from B; that is, the difference between 17 and 12, B's previous winnings. These 5 A

compares with his own hand, and of the 22 cards then in his hand returns B the five worst. He then acts in the same way towards C, demanding from him 8 cards. A in this way enters on the second round with a very strong hand. If, in the first, or any subsequent round, any one of the players fail to score a trick, he goes out of the game, and his stake, if there is one, is played for by the other two. Whoever scores all the tricks in any round wins the game. *Dák brúj* is a great favourite with native gentlemen, and they may be found playing it at all hours of the day. The natives of the District usually bet more or less on it, but the numerous Bengalis who have settled here do not.

Bibi dharádhari does not require so much skill as the last game, and is generally played by a much lower class of people. The word is a compound, meaning, 'catch the queen.' It is played by four persons placed as at whist, partners being opposite each other, but being allowed to communicate by signs or even by whispers. The arrangement of the players shows that this was not the original intention of the game. The cards are dealt as in whist, 13 to each player, the *rang* or trump having been determined as in *dák brúj*. The object of the game is to secure the queen of trumps, which can only be forced by a person holding the king or the ace. Skill is shown in this game, in which suit must be followed, by the player who holds the queen leading other trump cards, in such a way that his opponents must play the king and ace, if they have them, before he himself is compelled to produce his queen.

Nakshumár is a very simple game. The four knaves are taken out of the pack, and then the cards are thoroughly shuffled and placed in the centre of a circle of players. Each player takes one from the top and counts the pips. In this the king counts as twelve, the queen as eleven, and the ace as one. Whoever in two draws gets 17 pips, or the nearest number below that number, wins the stake, unless some of those who have drawn minor numbers wish to try their chance in a third or fourth draw. This game is almost entirely used for gambling purposes, and is much played during holidays, such as the *Hullí* festival in March.

In *rangmár*, which is played by two persons, usually a man and woman, the complete pack is used. When the cards are shuffled, they are placed between the players, who each take two cards at first, after the usual cutting and determining of the trump. A card is then played by one person, which the other tries to take with one

of the two in his hand. After this, the first trick, each person again takes one card from the pack. When this has been exhausted, the winnings of each party constitute the source from which his drawings are made. In this way the game goes on till one or other wins the whole pack, and 'beggars his neighbour.'

The denominations of the cards are—the *eká*, or ace; the *sáhib*, or master, the king; the *bíbí*, or mistress, the queen; the *ghulám*, or slave, the knave; the *dhelá*, or ten; the *nahilá*, or nine; the *atthá*, or eight; the *sattá*, or seven; the *chhaká*, or six; the *panjá*, or five; the *chauká*, or four; the *terí*, or three; and the *dúrí*, or two.

Satranj, or chess, and *pásá*, or draughts, are less played than in the southern and eastern Districts, and usually by immigrant Bengalis.

The games of boys are not numerous, and are very simple. *Kapáti*, or *hátudúdí*, is very like the English game of prisoners' base. Two bodies of boys of equal number stand in two courts, separated by a well-marked line. A boy of one party runs into the other court, crying *dúdí*, *dúdí*, and tries to touch with his hand any one of the other party. As long as one breath lasts, he is not attacked, and all fly from him. The instant he ceases to cry *dúdí*—and he is allowed only one breath—the whole party turn on him and try to catch him before he can reach the boundary-line and get into his own court. Any one whom he may succeed in touching, and he himself if he be caught, are reckoned as dead, and excluded from the game. *Gúldánda* consists in defending with a stick a single wicket or piece of earth, at which a second boy throws a short piece of wood about three inches long. Cowherds are fond of a game played with *kauris*, something like taw. Each player puts down two to four *kauris*, all in a row. Then each in turn tries to hit them with a large *kaurí*, called *ántá*. Whoever hits any of the small *kauris* in the row wins the whole. The manner of projecting the *ántá* is peculiar. It is placed on the top of the left index finger, which is well drawn back between the index finger and thumb of the right hand, and then let go like a miniature catapult.

AGRICULTURE. — RICE CULTIVATION in Purniah District is a matter of great agricultural importance. The quantity of this grain produced, although less than in purely Bengal Districts, is considerably larger than in the more western parts of Behar. There are three distinct kinds of rice,—the *boro* or spring rice, the *bhadal* or autumn rice, and the *agharí* or winter rice. The two latter are

divided into well-marked classes, coarse and fine, under which there are numerous subdivisions and varieties.

(1) BORO rice is grown on rather low lands, such as the shelving banks of rivers and marshes. As the floods retire in the end of October, but whilst a few inches of water still remain, the land is ploughed; and as the inundated area grows smaller during the whole of November, more land is similarly added. After ploughing, the land is allowed to remain ten or fifteen days, until the water entirely recedes. The seed is then sown broadcast on the strip of land first prepared, having been steeped in water for four or five days previous to sowing, in order to make it sprout, and afterwards put in a warm place and covered with grass. In two months—that is, by about the beginning of January, it grows to the height of a span or a span and a half, and is then transplanted into the land prepared later than the seedling bed. In May, or within four months after transplanting, the rice is ready to be reaped, so that the whole period, from ploughing and sowing to reaping, is about eight months. An industrious man with a pair of oxen can cultivate ten standard *bighás* or $3\frac{1}{2}$ acres. The seed required is $3\frac{3}{4}$ *mans* or $2\frac{1}{2}$ cwts., at the rate of 15 *sers* of 72 *sikka* weight per *bighá*. The average yield is 6 *mans* of unhusked rice per *bighá*, or $12\frac{3}{4}$ cwts. per acre.

(2) BHADAI rice is generally sown on high ground. The field is ploughed ten or twelve times after the first showers of spring, and the seed is sown broadcast in April or May. As soon as the young plants are six inches high, the land is harrowed for the purpose of thinning the crop and clearing it of weeds. The crop is harvested in August or September, as it ripens. The Collector returns the thirty-two principal varieties of *bhadai* rice as follow:—Coarse rice growing in a high, dry soil,—(1) *aghani*, in a high or medium moist soil, (2) *jab*, (3) *dhalkúni*, (4) *ghinola*, (5) *garábari*, (6) *lakhí*, (7) *kachái*, (8) *bherwá*, (9) *arrá*, (10) *thulmán*, (11) *pákhar*, (12) *barús*, (13) *bhathial*, (14) *liljí*, (15) *gamrí*, (16) *megh-sámar*, (17) *ándi*, (18) *rangpál*, (19) *súrdás*, (20) *ganharíá*. Fine rice growing in a high or medium moist soil,—(21) *bathásdol*, (22) *kanahá-duláhhá*, (23) *askarmá*, (24) *jábní*, (25) *ámághor*, (26) *muáí*, (27) *bíramphul*, (28) *kaiká*, (29) *soednsí*, (30) *ghúsar*, (31) *sajní*, (32) *jasudá*. *Bathásdol* is the finest of these varieties. *Bherwá* emits a pleasant odour, and *kanahá-duláhhá* is remarkable for its red grain tipped at either end with black. *Bhadai* rice is usually followed by a winter crop of pulse, oil-seeds, wheat, or fine transplanted winter rice, particularly in the case of *aghani*

Some late varieties admit of pulse being sown amongst them when nearly ripe. Land yielding *bhadai* rice also often produces a crop of *chind* in the spring, before the rice is sown.

(3) AGHANI, or winter rice, is usually cultivated on low land, although many species are grown on comparatively elevated soils. During the early months of the spring, every opportunity is taken to prepare land which does not bear a second crop, by repeated ploughings. In May, when there is usually a good shower of rain, a nursery-ground, called *bīrdār*, is ploughed four times, and the seed scattered thickly over it. When the seedlings make their appearance, another field is prepared for transplanting. By this time the rainy season has set in, and the field is dammed up by means of low ridges, so as to retain the water. It is then repeatedly ploughed until the water penetrates the soil, and the whole is reduced to a thick mud. The young rice is then taken from the nursery and transplanted in rows about nine inches apart, the plants of successive rows being made to alternate. Much *aghani* rice is also sown broadcast, but this is a less productive, though cheaper, method of cultivation. If there are early showers sufficient in April and May to enable the nursery beds to be thoroughly prepared, nearly all the sowings of the year are subsequently transplanted. But if, as often happens, there is no rain until the regular rains begin to set in, in the middle of June, the area of broadcast rice is greatly increased, and beds of seedlings are found only near rivers, tanks, and other sources of irrigation. Rice which is sown broadcast is called *lathahān*, and this manner of sowing is (to distinguish it from *ropā* or transplanting) styled *bāogī*. The harvest takes place in November and the beginning of December, except in years in which the rains extend far into October, when the ripening of the grain is proportionately delayed. The Collector returns the following seventy varieties of *aghani*:—Coarse rice sown in May and June, transplanted in June, July, and August, reaped in October, November, and December, and requiring eighteen inches to two feet of water to bring it to perfection:—(1) *Amāghaur*, (2) *perwāpankhi*, (3) *samāndaūri*, (4) *āndī*, (5) *kantudā*, (6) *panśrā*, (7) *bālan*, (8) *renghālohāg*, (9) *bachī*, (10) *duḍrāj*, (11) *rāmsār*, (12) *kaniāl*, (13) *pākhar*, (14) *sathiākarmā*, (15) *haranpānjār*, (16) *sīpāl*, (17) *jagarnathlā*, (18) *gehumān*, (19) *rasār*, (20) *hūndrā*, (21) *parjāth*, (22) *baharuā*, (23) *sālkumār*. Coarse rice sown in April and May, transplanted in May and June, reaped in December, requiring from three to six feet of water in the field in which it is

grown :—(24) *Arrá*, (25) *bajár*, (26) *utá*, (27) *áman*, (28) *píchar*, (29) *kajargor*, (30) *bargá*, (31) *janírd*, (32) *simrd*, (33) *barogar*, (34) *bíbor*, (35) *daras*, (36) *akálbír*. Fine rice sown in May, June, and July, transplanted from 1st July to 15th September, and harvested in the end of October and November :—(37) *Bíranphúl*, (38) *mál-bhog*, (39) *samjír*, (40) *madhuá*, (41) *básmathí*, (42) *kaká*, (43) *raharíá*, (44) *rámni*, (45) *chegaul*, (46) *ghúsar*, (47) *manhiá*, (48) *bhálsari*, (49) *gokhalsár*, (50) *mansará*, (51) *khoriá*, (52) *súrjyamúkhi*, (53) *lohábí*, (54) *súgápankhi*, (55) *kanakzír*, (56) *alsni*, (57) *kánud*, (58) *gíruá*, (59) *harparshád*, (60) *kirthpal*, (61) *rámduldrí*, (62) *das*, (63) *rájmagh*, (64) *sításár*, (65) *naúali*, (66) *phiuliá*, (67) *jasuá*, (68) *kauán*, (69) *mírchgol*, (70) *baharní*. Little water is necessary for fine *aghaní* rice. Even if no water stands in the field no serious harm is likely to follow, if the general rainfall is sufficient. At the utmost, a foot of water is advantageous; more may kill the plant. *Kheráhá* is a coarse *aghaní*, sown in April and May, reaped in December, and never transplanted. It grows on high land in about a span of water.

RICE HARVEST.—Rice is reaped by cutting off the ears (*sísú*), with about a foot and a half of the stalk attached. It is then tied up in sheaves or bundles (*bojh*), and carried to the threshing-floor (*khámár*), which is prepared by merely cutting off the surface turf with a spade, and sometimes, though very seldom, smoothing the earth with the palm of the hand, after having first sprinkled it with fine black earth (*chiknd-matt*) mixed with water. A pole or bamboo is now driven into the ground in the centre of the cleared area, round which the sheaves are placed, and a number of cattle are then brought up, tied neck to neck to the pole. These are driven round and round, and effectually tread out the grain, separating it from the stalk and the ear. The stalk left, called *neriú* or *podl*, and after the grain has been threshed out, *daoni*, is carefully stacked for the use of cattle when pasturage is scarce, or when the inclemency of the weather during the rains will not permit them to leave cover. The grain is now collected in a heap on the threshing ground, and the process of separating it from any stray straws, and cleansing it of dust and chaff (an operation called *osánd*), is next proceeded with. This is effected by lifting a quantity in a basket, and gradually letting it fall to the earth while a moderate wind is blowing. The grain falls on the ground, while all imperfect grain and intermixtures, being lighter, are blown away

to a distance. Thus purified, the rice is fit to be stored. Store-houses are called *bakhari* or *munahar*, according as they happen to be round or square. They are merely thatched houses, raised from the ground on blocks of wood or piers of masonry supporting cross beams or bamboos, on which the flooring, also of bamboo, rests. The inside of these repositories is covered with a coating of fine clay, as otherwise the rice would be liable to suffer from damp. The grain is taken out as occasion may require. In most places the same labourers both reap and thrash the grain. The cost of harvesting is thus estimated:—Every reaper is expected to cut in a day two bundles and six *mutis* of rice. Each bundle consists of twenty *mutis* or handfuls, the *muti* being a conventional measure, considerably exceeding what can be held in the closed hand. Of the forty-six *mutis* received from the reaper, the farmer keeps forty-two and gives his labourer four. The four *mutis* contain about $2\frac{1}{2}$ *ser*s, or 5 lbs., of rough rice. The rate for threshing, when performed by men, is one *ser* out of eight *ser*s thrashed. A good deal of fraud is believed to be practised by labourers in both operations.

RICE HUSKING.—Paddy or unhusked rice is shelled and converted into rice, or *chaul*, in two ways. In the *ushná* method, the grain is first boiled in water until the shells of the paddy split. It is then taken off the fire, permitted to cool, and pounded in a mortar or *ukhli*, if a small quantity is being prepared, or in a *ilhenki*, if the quantity is large. The husk is then separated from the grain, and the rice is fit for use. The *árwá* method is considered to yield sweeter rice than the other, as the rice is merely pounded without being boiled, and, after being cleaned from the husked chaff, is fit for use. The cost of cleaning rice, which is done mostly by women, varies according to the method followed. The owner gives 70 *ser*s, or 140 lbs., of rice in the husk, and receives back 40 *ser*s, or 80 lbs., of clean grain, when the operation is performed without previous boiling. Under the *ushná* system, the women get 65 *ser*s of rough rice, and return 40 *ser*s of clean. It takes two women two days to produce 40 *ser*s of clean rice, according to either method; and they are remunerated, in the case of *ushná*, with $4\frac{1}{2}$ *ser*s of clean rice and a half *ser* of broken rice, or *khud chaul*; in the case of *árwá*, with 5 *ser*s of clean rice and $1\frac{1}{4}$ *ser*s of broken rice. Each woman, therefore, earns $1\frac{1}{4}$ *ser*s of *ushná*, or $1\frac{1}{2}$ *ser*s of *árwá* rice, daily.

PREPARATIONS MADE FROM RICE.—*Khái* is obtained from un-

husked rice by roasting it in a pan of heated sand, which bursts the grain and makes the rice swell out. It is also called *lâwd*. *Murki* is made by mixing the *khâi* with boiling *jâgrî*, or brown sugar, and then drying it in the open air for an hour or two. In making *murti*, the unhusked rice is steeped in water for twelve hours, and is then taken out and boiled. These operations are then repeated, after which the rice is dried in the sun and is ready for husking. The cleaned rice is next fried in an earthen pan, and when half cooked, is taken out and thrown into hot sand and well stirred with a stick for a short time. The sand is then strained off through a sieve, and the *murti* is fit for use. *Churâ* is made by boiling unhusked rice and then frying it for a few minutes in a pan; it is then taken out and put in a *dhenki* or mortar, and pounded till it is quite flat. The best kind of *churâ* is made of half-ripe rice. *Châulbhâjâ*, as the name implies, is merely rice parched in an earthen pan with a little salt. It is a cheap article of food, and is eaten extensively by the poorer classes.

GREEN CROPS.—The following are the principal green crops:—
 Gram, *chand* or *bût* (*Cicer arietinum*), sown in October and gathered in April; grown on high clayey soil. Peas, *matar* (*Pisum sativum*), sown in October and reaped in April; requiring a high clayey soil, and yielding an out-turn of 12 *mans* (nearly 9 cwt.) per acre. Madras gram, *kûlthi* (*Dolichos biflorus*), sown in October and cut in December; grown on high sandy land, and yielding on an average 15 *mans* (11 cwt.) per acre. *Kalâi*, or kidney bean (*Phaseolus radiatus*); the seasons of sowing and reaping are the same as for the preceding, and the crop requires the same kind of soil. *Arhar* (*Cajanus Indicus*), sown in April and reaped in January; planted on high sandy land, and yielding on an average 4½ *mans* (about 3½ cwt.) per acre. *Meth*, a pulse, sown in May and reaped in January; grown on a high sandy soil. *Khesâri* (*Lathyrus sativus*), sown on low clayey soil in November and reaped in May; giving an out-turn of about 9 *mans* (about 6½ cwt.) per acre. *Kâlâ-mûg* (*Phaseolus Max*), sown on high clayey land in February and reaped in June; giving an average out-turn of 4½ *mans* (3½ cwt.) per acre. *Masûri* (*Cicer lens*), sown in November and cut in April; requiring a high clayey soil, and yielding an average out-turn of 6 *mans* (about 4½ cwt.) per acre. Linseed, *flsi* (*Linum usitatissimum*), sown and cut at the same seasons as the preceding. Mustard, *rdi* (*Sinapis ramosa*), sown in November and cut in February; grown on low sandy ground.

Rape, *sarishá* (*Sinapis dichotoma*), sown and reaped in the same seasons as the above on high and sandy ground, and yielding about $4\frac{1}{2}$ *mans* ($3\frac{1}{4}$ cwt.) per acre. Castor, *rerí* (*Ricinus communis*), sown on high sandy soil in October and reaped in April. *Til*-seed (*Sesamum Orientale*), sown in May and reaped in December. *Bora*, a pulse, sown in May and reaped in January. Both the two last are grown on high sandy soil.

VEGETABLES.—Pumpkin, *kadu* (*Cucurbita lagenaria*), sown in June, reaped from September to April, and cultivated on a high sandy and clay-mixed soil. Red pumpkin, *kadma* or *kumrá* (*Cucurbita pepo*), cultivated in the same seasons as the preceding. *Jhingi* and *ghira* (a species of *Luffa acutangula*), sown in June and reaped in October. *Rámturát* or *dharas* (*Hibiscus longifolius*), cultivated at the same seasons as the preceding. Cucumber, *khira* (*Cucumis sativus*), sown in March and gathered in May, requiring a high sandy soil; the yield is about 3000 cucumbers per acre. *Suthní* (*Dioscorea fasciculata*), requiring a high sandy soil; sown in October and gathered in January; yielding about 6 *mans* (or about $4\frac{1}{2}$ cwt.) per acre. Potato, *álu* (*Solanum tuberosum*), cultivated in the same way as the preceding, but having an average yield of 12 *mans* (nearly 9 cwt.) per acre. Sweet potato, *sakarkand* (*Convolvulus batatas*), also cultivated like *suthní*, and yielding on an average 6 *mans* (about $4\frac{1}{2}$ cwt.) per acre. Carrot, *gájar* (*Daucus carota*), cultivated in the same manner as *suthní*, and yielding on an average 12 *mans* (nearly 9 cwt.) per acre. Radish, *mulí* (*Raphanus sativus*), sown in October and gathered in November; grows on a high and sandy soil, and yields on an average 15 *mans* (11 cwt.) per acre. *Kachu* (*Arum colocasia*), sown in May and cut in February; cultivated on a high and sandy ground, and yielding about 18 *mans* (nearly $13\frac{1}{4}$ cwt.) per acre. Brinjal, *bdigun* (*Solanum melongena*), sown in September and gathered from October to December; cultivated on a high sandy ground mixed with clay, and yielding on an average 9 *mans* ($6\frac{1}{2}$ cwt.) per acre. Broad bean, *śm* (*Dolichos gladiatus*), sown in February and gathered in July and August; yielding about 12 *mans* (nearly 9 cwt.) per acre, and requiring the same soil as the preceding. *Palwal* (*Trichosanthes dioica*), sown in October, gathered from March to May, and requiring either a sandy or high clayey soil. Turmeric, *haldí* (*Curcuma longa*), sown in May and reaped in February; average yield, $4\frac{1}{2}$ *mans* ($3\frac{1}{4}$ cwt.) per acre. Ginger, *adrakh* (*Zingiber officinale*), cultivated in the same way as the preceding. Chillies,

mircha (*Capsicum frutescens*), sown in February and October, and reaped in January and May; requiring a sandy or high clayey soil, and yielding about $4\frac{1}{2}$ *mans* ($3\frac{1}{4}$ cwt.) per acre. Onion, *pidz* (*Allium ascalonicum*), sown in February and reaped in May; cultivated on the same soil as the preceding; average yield per acre, 30 *mans* (22 cwt.). Garlic, *rasun* (*Allium sativum*), sown in October and reaped in February, requiring a high clayey or sandy soil, and giving an out-turn of 9 *mans* (about $6\frac{1}{2}$ cwt.) per acre. *Ajwain* (*Ptychotis ajowan*), sown in February and reaped in May. Aniseed, *sonf* (*Pimpinella anisum*), sown in October and reaped in February; yielding $1\frac{1}{2}$ *mans* (rather more than 1 cwt.) per acre. Coriander, *dhaníyá* (*Coriandrum sativum*), sown in February and reaped in May, yielding about 3 *mans* (nearly $2\frac{1}{4}$ cwt.) per acre. The three last named require a high clayey or sandy soil.

The species of green vegetables are:—*Sajna*, (*Hyperanthera moringa*); the leaves, flowers, and tender seed-vessels are eaten in curries. *Kanta notiya ság* (*Amarantus spinosus*); *notiya ság* (*Amarantus oleraceus*); *heloncha ság*.

TOBACCO CULTIVATION.—The chief localities in which tobacco is cultivated in Purniah District are the high sandy ridges which are frequent between the old bed of the Kúsi and the Panár, and between the Kankái and Mahánandá, including the eastern portion of the Aráriyá and the western portion of the Krishnaganj Subdivisions. The best tobacco is grown in the villages of Dauriá, Malhariá, Kalábaluá, Jalálgarh, Damar, Kútháili, and Bisampur, in *parganá*s Háveli, Sultánpur, Sripur, and Asjá, which lie along the high strip of country extending from the town of Purniah northward and somewhat westward to Matiyári and Nawábganj. The soil farther to the east, which is richer and moister, is not so well adapted for the production of tobacco. The Collector is unable to give an accurate return of the number of acres under this crop; but he believes that it is not less than 15,000, of which 5000 are included in the Subdivisional jurisdiction of Aráriyá. The average return of a well-cultivated acre is about ten *mans* (about $7\frac{1}{2}$ cwt.) of the dry leaf; but as much as twenty *mans* (more than $14\frac{1}{2}$ cwt.) are occasionally derived from the best sorts of land.

The cultivation of tobacco commences in the month of August, or early in September, with the sowing of the seed in well-raised and carefully-prepared seed-beds. The seedling plants appear above the ground in from fifteen to twenty days, after which they

are allowed to go on growing till five or six leaves are formed, when they are ready for transplanting. During this period, the plant is very delicate, and is easily killed by heavy rain or strong winds. To protect it, the cultivator usually has mats and straw ready to place over the plant on the appearance of unfavourable weather. As soon as the seed has been sown, the cultivator commences to prepare the regular tobacco field by repeated ploughings, harrowings, and weedings. Manure also, and ashes, are liberally applied, wherever they are obtainable. About the 1st of October these preparations are complete, and the transplanting begins, an operation which is carried out with much neatness and care. The field is first marked out into squares, with sides of about eighteen inches or two feet. This is effected by tracking out the ground with a piece of cord along its length and breadth. The points of intersection of these lines are carefully marked, and a seedling is put down at each. The seedling is simply pulled up from its bed, but the injury to the root, if any such occur, rarely results in any material harm to the plant. High lands are sown first, the sowing of low damp lands, which yield inferior tobacco, being frequently delayed till the end of September. After transplantation, the land must be kept free of weeds, and the soil loose, by means of a small rake or hand hoe. During this period, manure is occasionally applied a second time to the stems of the plants. In the poorer kinds of soil, where the seedlings are sometimes three feet apart, the surface soil is stirred by means of a large rake drawn by cattle; but this is rarely found necessary. As soon as the plant has formed six to ten large leaves, it is necessary to nip off the top of the central shoot, and thus prevent the formation of other leaves; and the whole strength of the plant is concentrated in the few leaves thus left. Towards the end of January, or the beginning of February, the plants come to maturity, and the leaves which turn yellow are cut off by means of a hooked pruning-knife. As they are cut they are allowed to drop to the ground. The leaves are subsequently collected at the cultivator's house, and tied into bundles of five or six with fine strips of bamboo. They are hung in rows on horizontal drying-poles, where they are left till the leaf becomes brown and brittle. They are then no longer exposed to the sun till the breaking of the *chottd-barsdt* or early spring rains, when the dampness of the air so affects the leaves that they can be packed in larger bundles without breaking. It is probable that

this exposure to damp before packing seriously injures the quality of the tobacco afterwards. The bundles are usually wrapped in straw, and are thus brought to market, or are bought up by travelling agents of the larger merchants. The cost of cultivation per acre, according to the Subdivisional officer of Krishnaganj, is Rs. 39 (£3, 18s. od.). The items of this expenditure are as follow:—Tillage, Rs. 12; transplanting, Rs. 6; manure, Rs. 3; cost of seed, $1\frac{1}{2}$ *ánnás*; irrigation, Rs. 3; weeding, Rs. 3; trimming, Rs. 9; and curing, Rs. 3. This estimate, although it seems to have been accepted by the Collector, appears excessive in regard to ploughing and trimming charges, whilst my local inquiries have satisfied me that irrigation is rarely, if ever, employed. In 1873 the price per *man* was Rs. 2. 8. 0, a rate which, if the above estimate were true, could not remunerate the cultivator, whilst it is a fact that tobacco cultivation in Purniah increased during that year. Previously, the price had been Rs. 5 (10s.) a *man* in the local markets, and Rs. 7 (14s.) or Rs. 8 (16s.) in Calcutta. During the past few years the Calcutta price has been Rs. 9 to Rs. 12 (18s. to £1, 4s. od.) per *thongi*, or bundle of a little more than three *mans* of eighty pounds each. The traffic returns registered on the Ganges at Sáhíbganj showed that 15,000 *mans* of tobacco from Purniah passed that station in 1872; but the Collector is of opinion that not less than 20,000 *mans* are carried by that route. Probably as much more comes from the neighbourhood of Krishnaganj, and, passing down the Mahánandá, escapes registration at Sáhíbganj. The Collector also thinks that an equally large quantity is brought down the Kúsi to the railway stations in Bhágalpur District for despatch to Calcutta, or finds its way up-country by boat. The result of the above estimates is, that the total tobacco export of Purniah may amount to 60,000 *mans*, or 2143 tons.

As early as the year 1789, the Collector reported that the quantity of tobacco annually produced in Purniah District was, according to the most probable conjecture, not less than 50,000 *mans*, of which 30,000 were exported to Murshidábád and Calcutta. The subject of tobacco cultivation seems to have received considerable attention at that time, as in the following year experiments were made with foreign seed received from Calcutta.

FIBRES are cultivated to a considerable extent in Purniah District, and jute constitutes one of the most important exports. The following information regarding this staple is derived from a report by

the Collector, drawn up in 1873. In the years 1872-73, about 15,000 acres were cultivated with jute. Up to that period the cultivation had steadily increased, but in consequence of the dull state of the markets, it fell off in 1873. Previous to 1867 there was scarcely any jute cultivation in the District, but in that year it received an impetus from the great demand for gunny-bags. The tracts in which it is mostly grown lie along the *Turdi* in the Krishnaganj and Aráriyá Subdivisions, including *parganás* Sultánpur, Terakhardá, Srípur, Powakháli, and Fathipur Singhiá. The land is there high and the soil rich. The fields generally selected border the high banks of rivers and *kháls*. Jute is also produced to some extent on the high sandy plains which stretch from north-west to south-east right across the District, through Amúr-Kásbá, a little north of Purniah town. The land is prepared for the crop by repeated ploughing, harrowing, and weeding in March and April, little or no manure being used. The seed is sown broadcast in May after the first heavy shower of rain, after which the crop does not require much attention. Care, however, must be taken to prevent water from lodging in the field, as it rots the stem near the root, and destroys the plant. The crop is cut about October, before the cold season sets in. When the young plants have come up to the height of three or five inches, the land is sometimes weeded and harrowed by means of the implement called the *nángliá*. As soon as the plants are sufficiently grown and are about to blossom, they are cut off at about two inches from the root. They are then formed into small bundles and put into water, clods being attached to keep them submerged. They are left in the water (which should not be a running stream, but clear, stagnant, and free from sand) for a fortnight. They are then taken out and beaten with a heavy stick, to break and disintegrate the cellular tissue in which the fibres are set, after which the latter readily separate from the crushed and decaying stem.

The cost of the cultivation of a local *bighá*, which is equal to 22,500 square feet, is Rs. 3. 12 or 7s. 6d., the following being the items of expenditure :—Rent, 1s. ; ploughing, 2s. 3d. ; weeding, 9d. ; cutting, bundling, and soaking, 1s. 3d. ; washing, cleaning, and drying the stalks, 2s. 3d. The out-turn is estimated at about 6 *mans* per *bighá* ; and taking an acre to be equal to 2½ local *bighás*, this would give about 10½ hundredweights an acre. The Collector has no reason for thinking that the quality of the jute is deteriorating

in consequence of the present system of cultivation ; but he is of opinion that the mode of soaking and preparing the fibre is the cause of any inferiority in the quality of the article which may have been observed of late years. Instead of soaking the jute plants in good clean water, all the villagers go to the same dirty village tanks, or to small pools left in the fields after the floods of the rains have receded. The water of these pools soon becomes putrid, and necessarily injures the colour and texture of the fibre. The cultivators say that jute does not exhaust but rather improves land, and that a fine crop of mustard is oftener got from a field on which jute has grown, than from one from which other crops have been taken. Mr. Forbes, a large European landholder of Aráriyá, states that the cultivation of jute has had a most beneficial effect, both on the people and the soil. It is in many respects like indigo. It can be grown with advantage upon land on which late rice would fail, and which, after the crop has been reaped, can be sown with mustard, and, in some cases, with early rice. The native idea is, that being cut green before it is allowed to form its seed, it does not exhaust the soil as much as a crop which is allowed to come to full maturity. The cultivation has not had the effect of decreasing the amount of cereals or other crops, but has been the cause of more land being brought under cultivation. Mr. Forbes states that in Sultánpur *parganá*, in consequence of the large increase in the quantity of land brought under this crop, the cowherds of the Goálá caste have much difficulty in finding in British territory sufficient pasturage for their cattle ; but in this the Collector thinks he must be mistaken. Manure is but little used, as, if land be allowed to lie fallow for a year, and be then sown with jute, and afterwards with mustard or rice, no manure is needed. Jute is exported to the large markets near Calcutta, or is sent up-country to Mirzápur, generally by water, although when trade is brisk the railway is preferred. The cost of carriage to Calcutta is about Rs. 20 per 100 *mans*, or £2 per 70 hundredweights. The quantity of jute, either raw or in the form of gunny-bags, exported annually from Purniah District, is estimated at 200,000 *mans*. According to the returns of the Ganges-borne trade passing Sáhibganj, 1842 *mans* of raw jute, and 41,087 *mans* of gunny-bags, passed by that route from places in Purniah during the year 1872. Besides this, there must be taken into consideration the cargoes which escaped registration by coming down the Kúál and going up the Ganges ; and also those which, coming

from Krishnaganj down the Mahánandá, and entering the Ganges below Sáhíbganj, were not subject to registration ; besides what was sent by rail.

Jute does not pass through many hands in Purniah. It is received direct from the cultivators, under advances by the *goladdrs*, or agents for the Bhadreswar, Calcutta, or Mirzápur merchants, and is by them shipped to its destination. In the northern part of the District, two-thirds of the *rayats* cultivate jute more or less, and in the south perhaps one-fourth. The cultivation is not confined to any particular class, nor are the cultivators here, as in the eastern Districts, chiefly Musalmáns. Jute is in Purniah known as *patud*, and is subdivided into species called (1) *hathid*, (2) *bhaddiyá*, (3) *muniási*, and (4) *bhaunachak*. The first and third are the *Corchorus capsularis*, and the other two *Corchorus olitorius*. The *hathid* is a coarser kind than the *muniási*, and is grown later in the season. The principal markets in the District in which jute is largely sold, and which are attended by the *daláls* or brokers of the wholesale merchants, are :—Kásbá, Ekambá, and Purniah city, in *parganá* Háveli ; Bhawánipur, Dumar, and Lakshmipur, in *parganá* Dharmipur ; Palásbaní, in *parganá* Srípur ; Dulálganj, in *parganá* Surjyapur ; Sáifganj, in *parganá* Katiyár ; Barsol, in *parganá* Badaur ; Baliá, Nawábganj, Katakosh, and Ahmadábád, in *parganá* Kánkjol ; Hasláganj, in *parganá* Kumaripur ; Chakái Baluá, Aráriyá, Dunria, Jhagua Baluá, Amgáchí, Ukhwá, Suláigarh, and Ganámatiyárl, in *parganá* Sultánpur ; Siktl and Bardahá, in Fathipur Singhié ; Kúrsakátá, Sonápur, Nawábganj, and Mírganj, in *parganá* Terakhardá ; Rániganj and Maskarl, in *parganá* Háveli ; Panjipará, Baligorá, Krishnaganj, Káliálganj, Kharkarl, Panborá, Gúnjoriá, Díwánganj, and Sáhíbganj, in *parganá* Surjyapur ; Rúpdahá, in Powákhalf ; Bahádurganj, Sontha, and Kutl, in *parganá* Srípur

AREA AND OUT-TURN OF CROPS.—According to the Statistical return forwarded by the Collector to the Board of Revenue in 1870-71, the total cultivated area of Purniah District was estimated at 2,315,910 acres ; the uncultivated area capable of cultivation at 285,440 acres, and the uncultivable waste at 571,029 acres. As regards the distribution of cultivation under the principal crops, the same return shows the following figures :—Rice, 1,736,932 acres ; wheat, 46,318 ; other food-grains, 46,318 ; oil-seeds, 254,750 ; indigo, 25,159 ; fibres, 69,477 ; tobacco, 69,477 ; vegetables, 69,477.

On the 30th April 1876, the present Collector, Mr. Kemble,

supplied me with detailed information on this subject, which he had worked out very fully from the Survey records, supplemented by his own extensive acquaintance with the District during a period of over four years. About 1871, a previous Collector, Mr. Worgan, had made a detailed examination of these Survey papers, and in communication with the Surveyor-General had reconciled many discrepancies. His observations, however, extended only to a comparison of the cultivated, cultivable, and waste areas, whilst Mr. Kemble has added returns of the area under each separate crop. The latter officer believes the figures he has obtained to be nearer the truth than anything previously prepared; and they are probably as accurate as any such estimates can be which are not founded on a cadastral survey, or on detailed and carefully checked returns by the landholders. The information collected by Mr. Worgan and Mr. Kemble was given *parganá* by *parganá*, and is reproduced below with some necessary changes of arrangement and a little condensation.

ASJA.—This is a very scattered *parganá*, but almost entirely confined to the Headquarters Subdivision. According to the calculations made by Mr. Worgan, there were 61,285 acres cultivated, and 12,089 uncultivated, the remaining 8481 acres not being accounted for. This gives a proportion of 83 per cent. of cultivable land to 17 of waste. In the Revenue Survey, 16 villages, out of 262 then existing, were accurately measured by *khasrá*, or field to field plotting. They covered 9891 local *bighás*, of which 7614 were cultivated; 2277 were uncultivated, of which 1124 were cultivable. The proportion of cultivated to uncultivated land was, therefore, 77·0 to 23·0. Since the time of the Survey, the Collector thinks that cultivation in this *parganá* has increased, and he would put down the cultivated area at the present day at about 63,000 acres, and the waste and uncultivated area at 10,000 acres. Of the cultivated area, fully 43,000 acres are under winter rice; of the rest, 4000 acres yield oil-seeds, and an equal area pulses; 2000 acres wheat and barley; 2000 acres jute; 1000 acres tobacco; and about 4000 acres *bhadal* rice. This latter crop is generally grown on the same land which is afterwards sown with mustard and other oil-seed crops. There are 2000 acres covered with indigo.

BADAUR.—The total area of this *parganá*, which comprises two Subdivisions, Parmanandpur and Malhaur, is 189,351 acres, according to the *parganá* map; but according to the *sákbashi*

or village area plans, it is 183,218 acres. According to the calculation made by Mr. Worgan, there were 138,733 acres cultivated, and 44,485 uncultivated. The remaining 6133 acres are not accounted for. This gives a proportion of 75·7 of cultivable to 24·3 of waste land. In the Revenue Survey, 95 villages out of 588 were accurately measured. They covered an area of 92,195 local *bighás*, of which 71,295 were cultivated; 20,899 were uncultivated, of which 6303 were cultivable. The proportion of cultivated to uncultivated land was, therefore, 77·4 to 22·6. Badaur lies in the east of the District, bordering on Dinájpur. It is a great rice-producing country, and its products find their way down country by Raiganj, Barsoi, and other marts on the Mainámandá. Cultivation has increased, and Mr. Kemble now calculates that about 150,000 acres are under cultivation, and 33,218 waste. About 100,000 acres produce winter rice, about 25,000 *bhadaí* rice and oil-seeds, about 15,000 garden produce and pulses, 5000 jute, 2500 wheat, and 2500 tobacco.

BHAURA.—The area of this *parganá* is only 26 acres, most of which yield cold-weather rice; but there are about 5 acres of tobacco, and a little mustard is also grown.

BURIGANGAL.—The area of this *parganá* at the time of the Survey was 6552 acres. Mr. Worgan's estimate shows 1990 acres as under cultivation, and 4561 uncultivated, leaving one acre to be accounted for, this gives a proportion of 28·8 of cultivated to 71·2 of waste land. In the Revenue Survey, 2 villages out of 16 were accurately measured. They occupied an area of 4537 local *bighás*, of which 4110 were cultivated, and 1427 uncultivated; of these last, 1033 were cultivable. The proportion of cultivated to uncultivated land was, therefore, 74·2 to 25·8.

CHAK DILAWARI.—The total area of this *parganá* is 24,553 acres, but the records do not show how much of this area was waste and how much cultivated when the Survey was made. It is now in a backward state, about 9500 acres being waste, and about 15,000 cultivated. The crops are mainly those harvested in the spring,—7000 acres yielding wheat and pulses, 3000 acres indigo, 2000 mustard and oil-seeds, and 3000 *bhadaí* rice as a first crop.

DILAWARPUR.—The total area of this *parganá* is 14,233 acres, as recorded in the *parganá* map, and 18,100 according to the village plans. At the time of the Survey, it contained 14,240 acres of cultivated, and 3860 of waste land. The excess of 3867 acres is

not explained by either Collector, although it points to some source of error of considerable magnitude. The proportion of cultivated to waste land was, therefore, 78·7 to 21·3. Since the Survey, cultivation is said to have diminished, and Mr. Kemble estimates the present cultivated area at about 10,000 acres. Wheat and pulses occupy 4000 acres, *bhadaï* rice about 2000 acres, winter rice about 2000 acres, mustard about 500 acres, potatoes and garden produce about 500 acres.

DHARMPUR.—The area of this *parganá* was 690,143 acres at the time of the Survey, but the *parganá* maps give no information as regards the proportion of cultivated and waste lands for the total area. In 71 out of 445 villages, however, a field survey was made, from which it appears that out of the 162,529 local *bighás* contained within their limits, 106,223 were cultivated; and 56,305 were uncultivated, of which 33,485 were cultivable. The proportion of cultivated to uncultivated land was, therefore, 65·4 to 34·6. Mr. Kemble states, that from subsequent local surveys, he is of opinion that about 20 per cent. of this area is uncultivable waste, and about 20 per cent. more fit for cultivation but not cultivated. There are at present about 440,000 acres under cultivation,—75,000 yielding pulses, 100,000 winter rice, 100,000 *bhadaï* rice, 80,000 oil-seeds, 55,000 wheat, and 30,000 indigo.

FATHIPUR SINGHIA.—The total area of this *parganá* is 149,703 acres, out of which, at the time of the Survey, 102,950 acres were cultivated, 21,851 were fit for cultivation, and 22,965 were unreclaimable waste. Mr. Kemble does not think that of late years much of the cultivable waste land has been brought under the plough. The main crop is winter rice, which covers probably 75,000 acres. There is a little jute, covering perhaps 10,000 acres. *Bhadaï* rice and oil-seeds are grown on about 15,000 acres, and tobacco on about 3000 acres. According to the information collected preparatory to the *batwárá*, or division of this *parganá*, as part of the Srínagar property, the total area was 147,766 acres, of which 102,950 acres were cultivated; 44,816 were uncultivated, of which 22,965 were cultivable. The proportion of cultivated to uncultivated land was, therefore, 81·5 to 18·5.

GAGRA.—The area of this *parganá* is 5467 acres. According to the calculations made by Mr. Worgan, there were 3484 acres cultivated, and 1275 uncultivated; the remaining 709 acres are not accounted for. This gives a proportion of 73·2 of cultivated,

and 26·8 of waste land. In the Revenue Survey, 1 village out of 4 was measured. It consisted of 4498 local *bighás*, of which 3174 were cultivated; 1324 were uncultivated, of which 524 were cultivable. The proportion of cultivated to uncultivated land was, therefore, 70·6 to 29·4. Only one village, Jádúpur, now belongs to Purniah, all the rest having been transferred to Maldah. The area of this village is 60 acres. Twenty acres of this are waste. *Bhadaí* rice is grown on about 40 acres, on part of which a cold-weather crop of oil-seeds is also raised.

GARHI.—The total area of this *pargana* is 28,804 acres. There are no records whatever to show the proportion of cultivated land to waste; but Mr. Kemble considers that it is somewhat similar to Kánkjol, and would therefore estimate about 16,500 acres as cultivated, and 12,300 acres as waste. The principal crops are pulses and other spring crops; about 6000 acres yield pulses, 2000 acres wheat, 4000 acres oil-seeds and mustard; 2500 acres are cultivated in indigo and the best *bhadaí* rice. There is scarcely any winter rice.

GARARI.—This is properly a part of Dharmpur, but as it does not belong to the Darbhanga estate, it has been surveyed separately, and is considered a distinct *parganá*. It covered, at the time of the Survey, 66,491 acres, of which 26,281 were cultivated; 7907 were cultivable waste, and 32,303 were uncultivable waste. This gives a proportion of 39·4 of cultivated land to 60·6 of uncultivated or waste. Cultivation has fallen off, owing to the ravages of the Kúsi. At present, only about 25,000 acres are cultivated, of which about 10,000 are under winter rice, and about 5000 under *bhadaí* rice; 4000 are under mustard and other oil-seeds; 1000 under tobacco; 4000 under pulses, wheat, etc.; and 1000 under indigo.

HATANDA.—The total area of this *parganá* is 55,541 acres. Mr. Worgan's calculations show that there were 37,042 acres under cultivation, and 14,769 acres uncultivated, leaving a balance of 3730 acres to be accounted for, of which 400 local *bighás* are stated to be of doubtful standard. The proportion, therefore, is 71·5 of cultivable land to 28·5 of waste. Only five villages now belong to Purniah, all the remainder having been transferred to Maldah. These five villages are (1) Abádpur Milik, comprising 32 acres, of which 10 acres are waste or fallow, 20 acres produce pulses (*musúri* and *khesárf*) and mustard, and 2

acres are covered by gardens or houses. (2) Baráí, comprising 322 acres, of which about 150 are waste or swamp land; and the rest are principally cultivated in spring crops, such as wheat and oil-seeds and pulses. (3) Gangori Milik, comprising 41 acres, of which about 15 are waste and the rest under winter rice. (4) Islám Milik, 118 acres in extent, of which 40 acres are waste, the rest being partly under rice and partly under pulses, grain, etc. (5) Sukhpurá, covering 525 acres, of which about 200 acres are waste. The rest yield a crop of rice, but pulses and wheat are more generally cultivated. The total area of this *parganá* within Purniah District is now 1038 acres, of which 410 are waste.

HAVELI PURNIAH.—The total area of this *parganá* is 481,119 acres. From the Survey papers, and from the papers of the *batwárá* or partition, concluded about the same time, the cultivated area was found to be 301,444 acres; waste, 56,753; and land fit for cultivation but uncultivated, 122,922. The proportion of cultivated to uncultivated land was, therefore, 62·7 to 37·3. This *parganá* runs diagonally across the District, from the north-west to the south-east. Of late years, cultivation has not much increased, except in some villages where the high lands near houses have been planted with tobacco. Of the 320,000 acres which Mr. Kemble now estimates to be under cultivation, he considers 160,000 to yield winter rice, 55,000 jute, 25,000 tobacco, 10,000 wheat, and 45,000 autumn rice and oil-seeds. There is also a considerable indigo cultivation, covering about 25,000 acres.

KADWA.—The total area of this *parganá*, which includes the two subdivisions of Shaikhroná and Beláwand, is 87,848 acres by the *parganá* map. According to Mr Worgan's calculations founded on the *tákkashit* maps, there were 88,188 acres, an excess of 340 acres. Of this latter total, there were 71,645 acres cultivated, and 16,543 uncultivated, which gives a proportion of 81·3 of cultivated land to 18·7 of waste. In the *khusrá* survey, 48 out of 218 villages were measured. They consisted of 62,259 local *bighás*, of which 48,706 were cultivated, and 13,553 uncultivated; of the latter, 5286 were fit for cultivation. The proportion, therefore, of cultivated to uncultivated land was as 78·2 to 21·8. Cultivation, the Collector states, has increased, and at the present time there are quite 75,000 acres under crops. About 25,000 acres yield winter rice; 20,000 autumn rice; 10,000 jute; 2000 vegetables and other

garden products; 3000 indigo; 7500 mustard and oil-seeds; and 7500 pulses.

KANKJOL.—The following figures are derived from inquiries carried out in 1847, in anticipation of the partition of this *parganá* amongst the co-sharers of the original proprietary family. Total area, 174,324 acres, of which 103,518 acres were under cultivation, and 75,184 acres uncultivated, showing a balance of 4018 acres in excess of the area recorded in the *parganá* map, of which 545 local *bighás* were said to be of doubtful standard. The proportion, therefore, would be 57·8 of cultivated to 42·2 of uncultivated land. In the *khasrá* survey, 12 villages out of 300 were measured, consisting of 25,709 local *bighás*, of which 16,740 were cultivated; 8969 were uncultivated, of which 3069 were fit for cultivation. The proportion of cultivated to uncultivated land was, therefore, 65·2 to 34·8. At the present time, only 162,146 acres lie in Purniah, the rest, comprised in 14 villages, having been transferred to Maldah in 1873. Out of the Purniah area, at the time of the Survey, about 95,000 acres were cultivated, and 67,000 acres waste. The floods of the Ganges and the smaller rivers running down towards the Mahánandá have retarded cultivation, which has fallen off of late years. There are probably now not more than 90,000 acres cultivated. The principal crops are oil-seeds and *rabí* food-grains, such as wheat. Mr. Kemble estimates that 30,000 acres are under pulses, 10,000 under mustard, 20,000 under *bhadái* rice; 10,000 under indigo, 15,000 under wheat and barley; and the remainder, 5000, under winter rice.

KASIMPUR.—The statistical returns of the Board of Revenue show the area of this *parganá* to be 5378 acres. According to Mr. Worgan's Report, the area was 5275 acres, of which 2096 acres were cultivated, and 3179 uncultivated. The *parganá* map shows a still further reduction of 368 acres, making the area 4907 acres in all. The proportion obtained from Mr. Worgan's calculations would be 39·7 of cultivated land to 60·3 of waste. At the present time, this *parganá*, like those of Hatandá and Gográ, properly belongs to Maldah District. Only nine villages,—Adsherpur, Achintapur, Bákípur, Gobindpur, Islámpur *jót*, Jáfarpur, Kanjipur, Kankípur chak, Mohanbárá, and Parbatpur,—covering a total area of 1356 acres, are now attached to Purniah. Out of these 1356 acres, about 540 are waste and fallow, the whole *mauzá* or village area of Gobindpur being quite uncultivated. The remaining 816 acres are

principally under pulses, wheat, and other spring crops. *Bhadai* rice, however, to the extent of about 200 acres, is also grown.

KATIYAR.—The total area of this *parganá* is 66,464 acres, according to the Board of Revenue. Since the time of the Survey there has been little change. There are perhaps 35,000 acres cultivated, of which 5000 are under indigo, 4000 under oil-seeds and mustard, and 6000 under pulses; 8000 acres yield *bhadai* rice, and about 5000 winter rice; 3000 are under jute, and 4000 under wheat and vegetables. From certain *batwárá* or partition papers of 1845, it appears that there were then only 62,811 acres, 3653 less than shown in the Board of Revenue's *Parganá* Statistics. Of the total area, 33,534 acres were cultivated, and 29,277 uncultivated, thus giving a proportion of 53·4 of cultivated land to 46·6 of waste.

KHOLRA.—The area of this *parganá* is 5510 acres according to the maps, but Mr. Worgan shows a total area of 5402 acres, of which 3787 were cultivated, and 1615 uncultivated. The proportion of cultivated to uncultivated or waste land is 70·1 to 29·9. At the time of the Revenue Survey, 3 out of 12 villages were measured. They consisted of 3854 local *bighás*, of which 2061 were cultivated, and 1793 uncultivated; of these latter, 1091 were fit for cultivation. The proportion of cultivated to uncultivated land was, therefore, 53·5 to 46·5. At present, this *parganá* contains about 5000 acres of cultivation, principally winter rice, which occupies 3500 acres. There are also 750 acres of mustard and *bhadai* rice, and about 300 acres of jute. The remaining 450 acres yield pulses and vegetables.

KUMARIPUR.—According to the *batwárá* or partition inquiries of 1845, the total area of this *parganá* was shown to be 42,375 acres, of which 27,098 were cultivated, and 15,277 waste; of the latter, 13,244 acres were cultivable. The proportion of cultivated to uncultivated land was, therefore, 64 to 36. This also represents the present state of the *parganá*. There are about 9000 acres of winter rice, and 6000 acres of *bhadai*, 3000 acres of mustard and other oil-seeds, 4000 acres of wheat and pulses, about 4500 acres of indigo, and 500 acres of potatoes and garden produce.

TAPPA LAKHPURA.—In 1845 the total recorded area was 3311 acres, of which 2310 acres were cultivated and 1001 acres uncultivated. Of the latter, 353 acres were cultivable. The proportion, therefore, was 69·8 of cultivated to 30·2 of uncultivated land. No accurate *khasrá* measurements were made in this *parganá*. At the

present time, 1200 acres are under pulses, 600 under mustard, 200 under indigo, and 300 under *bhadai* rice.

MAHINAGAR.—According to Mr. Worgan's return, there were 9267 acres of cultivated land and 5866 acres waste, leaving a balance of 243 acres to be accounted for. The proportion of cultivated to uncultivated land was, therefore, 61·3 to 38·7. This *parganá*, though formerly part of Purniah, has now been transferred to Malkah, except two villages, namely, Chandna Milik, covering 42 acres, and Saluka, occupying 204 acres. Out of these 246 acres, about 100 are waste and fallow. The crops grown are pulses and oil-seeds in the cold season, and rice as an autumn crop, in about equal quantities.

MAIDAWAR.—The total area of this *parganá* is 13,313 acres. Mr. Worgan's calculation shows 9705 acres as under cultivation and 3571 as waste, leaving a balance of 37 acres to be accounted for. This gives a proportion of 73·1 of cultivated land to 26·9 of waste. Of the 38 villages in this *parganá*, 10 were measured by *khasrá*, and were found to cover 10,733 local *bighás*, of which 7989 were cultivated and 2744 uncultivated, the latter including 925 *bighás* fit for cultivation. This would give a proportion of 74·5 of cultivated land to 25·5 of waste. Mr. Kemble considers that fully 10,000 acres are now under cultivation,—4000 yielding winter rice, and 3000 *bhadai* rice; 1000 yield jute, about 500 indigo and garden produce, 750 mustard and oil-seeds, and 750 pulses.

PAWAKHALI.—The total area of this *parganá* is 81,264 acres, according both to the *parganá* and village maps. It lies on the north of the Srípur and Surjyapur *parganas*, near the Nepál frontier. Seven out of 118 villages were accurately measured in 1854, under the operation of a partition suit, and were shown to cover a total area of 15,017 local *bighás*, of which 12,233 were cultivated and 2784 uncultivated, the latter being inclusive of 321 *bighás* of cultivable land. This gives a proportion of 81·5 of cultivated to 18·5 of uncultivated or waste land. At the time of the Survey, the area of cultivation and waste was not given. At present, as regards some villages, the Collector does not think that cultivation has increased. There are now about 70,500 acres cultivated and about 10,764 waste. About 50,000 acres are under winter rice, 15,000 under jute and tobacco, and about 5500 under *bhadai* rice, oil-seeds, and pulses.

SHAHPUR.—The total area of this *parganá* is 2366 acres.

Mr. Worgan reports 1442 acres under cultivation, and 924 waste. This would give a proportion of 61 of cultivated land to 39 of waste. Mr. Kemble thinks that cultivation has increased in this *pargand*, and that at present 1600 acres are under tillage,—800 yielding winter rice, 200 indigo, 400 mustard and *bhadai* rice, and 200 pulses.

SULTANPUR.—The total area of this *pargand* is 194,017 acres, as recorded by the Survey. According to the measurements made in 1845, in connection with the partition of the *pargand*, the total area recorded was 190,637 acres, of which 136,722 acres were cultivated and 53,915 uncultivated; of the latter, 26,405 acres were said to be cultivable. The proportion was, therefore, 71·8 of cultivated to 28·2 of waste land. The Collector is of opinion that the state of the land has remained unaltered since that period. Of the cultivated area, 65,000 acres are under winter rice, 15,000 under tobacco, 20,000 under autumn rice, oil-seeds, and pulses; 10,000 remaining acres yield jute, and a little over 26,000 are cultivated with indigo.

SRIPUR.—The area of this *pargand*, according to the Board of Revenue Statistics, is 231,744 acres. Mr. Collector Worgan shows a total area of 232,095 acres, of which 180,722 were cultivated and 51,373 uncultivated; the latter figure including 22,522 acres of cultivable land. The difference of 351 acres is unexplained. The proportion, therefore, is 77·9 of cultivated to 22·1 of uncultivated or waste land. At present, cultivation extends over about 200,000 acres, of which 100,000 produce winter rice, 40,000 *bhadai* rice, 20,000 jute, 10,000 tobacco, 15,000 mustard, and 15,000 pulses.

SURJYAPUR.—This is one of the largest and best cultivated *pargands* in the District. It covered an area of 467,190 acres at the time of the Survey. The partition measurements of 1845 show a total area of 465,184 acres, so that there is a difference of 2006 acres to be accounted for. No statistics are given of cultivated and waste lands. Thirty-six out of 644 villages were accurately measured, and contained an area of 68,365 local *bighas*, of which 58,608 were cultivated and 9757 uncultivated; this latter figure included 3790 local *bighas* that were fit for cultivation. The proportion, therefore, was 85·7 of cultivated to 14·3 of waste land. Mr. Kemble estimates that at the present time, 430,000 acres are under cultivation and 35,000 acres are waste. Of the tilled area, 250,000 acres are covered with winter rice, 50,000 acres with jute, 30,000 acres with tobacco, and 100,000 acres with autumn rice, oil-seeds, and pulses. Of late years the cultivation of jute has considerably increased.

TAJPUR.—The total area of this *pargand* is 115,338 acres by the *pargand* maps, but 115,158 according to the village plotting. According to Mr. Worgan's calculations, there were 86,110 acres cultivated and 29,048 uncultivated, of which 70 local *bighás* are said to be of doubtful standard. The remaining 180 acres are not accounted for. This gives a proportion of 74·8 of cultivated to 25·2 of waste land. In the Revenue Survey, 125 villages, out of 318 then existing, were accurately measured, and were found to cover 123,592 local *bighás*, of which 97,262 were cultivated; 26,330 were uncultivated, of which 6775 were fit for cultivation. The proportion of cultivated to uncultivated land was, therefore, 78·7 to 21·3. The Collector states that this is far from correct at the present time. This *pargand*, like Badaur, is now a great rice-producing district. Mr. Kemble considers that the area under cultivation must be about 95,000 acres, leaving 20,000 uncultivated. Of the cultivated tract, 75,000 acres are under winter rice, 10,000 under *bhadai* rice and oil-seeds, and 10,000 under jute, chillies, potatoes, and miscellaneous crops.

TERAKHARDA.—The total area of this *pargand* is 48,136 acres by the *pargand* map, and 48,803 by the District map. The Collector thinks the former figure the more correct. There is no information available regarding the amount of land cultivated and uncultivated for the whole of the *pargand*. In 1854, 4 villages out of 74 were accurately measured, and were found to cover a total area of 12,265 local *bighás*, of which 9848 were cultivated and 2417 uncultivated, 1299 of the latter being fit for cultivation. The proportion, therefore, was 80·3 of cultivated to 19·7 of uncultivated or waste land. From such records and information as are available, Mr. Kemble estimates that there are now about 38,000 acres under cultivation, of which 18,000 are under winter rice, 5000 under mustard and oil-seeds, 5000 under jute, and 3000 under tobacco; whilst 5000 yield pulses. Some 2000 or 3000 acres, on which spring crops are grown, also yield autumn rice.

CONDITION OF THE CULTIVATORS.—Seventy-five acres would be considered a very large farmer's holding in Purniah, and eight acres, or under, a very small one. Twenty acres may be put down as a fair-sized, comfortable holding. Eight acres is as much as a single pair of ordinary bullocks can keep under cultivation. The Collector reports that a farmer cultivating 15 local *bighás*, ~~or 15~~ acres, is not

nearly so well off as a respectable retail shopkeeper, nor is the yield of such a holding equal to Rs. 8 or 16s. a month. If the land be averagely good, yielding rice in autumn, and mustard in the cold weather, the following may be taken as a rough calculation of the financial position of a farmer working such a holding in Purniah:—

Value of produce of one local *bighá* of land—*bhadai* rice, 10 *muns*, at 12 *ánnás* per *man*, Rs. 7. 8. 0; mustard, 5 *mans*, at Rs. 2 per *man*, Rs. 10; total value, Rs. 17. 8. 0. Charges for the rice crop—ploughing, at 1½ *ánnás* or 2¼d. daily for four days, 6 *ánnás*; preparing during 12 days, Rs. 1. 5. 0; sowing, 4 days, 6 *ánnás*; weeding, 14 days, Rs. 1. 5. 0; reaping, 4 days, 6 *ánnás*; sced, 30 *sers*, Rs. 1. 4. 0; total, Rs. 5. For the mustard crop—ploughing, preparing, sowing, weeding, and reaping, Rs. 3. 12. 0; seed, 5 *sers*, 8 *ánnás*; total charges for both the crops, Rs. 9. 4. 0. Then we must reckon the interest lost to the *rayat* by his outlay on cattle and implements, which are worth about £4 for a small holding. Estimating this at 20 per cent., or Rs. 8 per annum, the charge per *bighá* on a holding of 15 *bighás* would be about 8 *ánnás*. Next, allowing Rs. 2 a month for six months for the food of a pair of bullocks, or Rs. 12 in the year, we must add about 12 *ánnás* per *bighá* on this account. Add for rent R. 1, and the charges on one *bighá*, in a 15 *bighá* holding, will amount to Rs. 11. 8. 0 per annum. Deducting this from the receipts, we get Rs. 5. 12. 0 (11s. 6d.) as the profit per *bighá*, or Rs. 86. 4. 0 (£8, 12s. 6d.) as the total annual profit of a 15 *bighá* farm of really good average two-crop land which is fully cultivated, exclusive of the cost of carrying the produce to market. The Collector thinks the general run of tenants do not get so good a return as this. He is borne out in this opinion by the Subdivisional officer of Aráriyá, who reports that the highest rent of any land in the Subdivision is Rs. 1. 8 per *bighá*, and that only where the local *bighá* is very large. Such land might yield 10 *mans* of rice per standard *bighá*, but he thinks that 5 or 6 might be called a fair yield. On such land it is not likely that a second crop would be obtained. However, a crop of grain, or of *khesári* or *musúri* pulses, might be obtained, but such a crop would not exceed one *man*, and at harvest time would be worth only one rupee. The value of paddy in this Subdivision, especially in the fertile *paragana*s of Sripur and Terakhardá, is at harvest time about 8 *ánnás* per *man*; later in the year it rises to 12 *ánnás*; and when brought down and sold in the Kásbá market, its

value is about $1\frac{1}{2}$ *man* for the rupee. Therefore a fair return from a *bighá* of rice land renting at 1 rupee per *bighá* would be—rice, 6 *mans*, Rs. 4; and a pulse crop, R. 1; total, Rs. 5. The Collector adds: 'It is not easy to give an idea of what would be considered a large holding for a *rayat*. In the north-western part of *parganá* Háveli Purniah, near Sáísganj, I should think 400 *bighás*, or 300 acres, by no means a large holding. The land is a series of sandy wastes; the rent about 1 *ánná* per *bighá*; and the income derived from it is 4 *ánná*s per head of cattle allowed to graze on it during four months of the year. On the other hand, 100 *bighás* is an extremely large holding in Terakhardá; and when a *rayat* holds that amount, he rarely cultivates more than 50 *bighás* himself. These Terakhardá *bighás*, however, are to the standard *bighá* in the rate of 36 to 16.' Further, he would consider that a holding paying less rent than Rs. 25 would be considered a small one in the Sultánpur and Háveli Purniah *parganá*s; and one of 15 or 20 standard *bighás*, or 5 to 7 acres, small in Terakhardá, Fathipur Singhía, and Srípur.

Indebtedness among the tenant class is almost universal. Debts are generally repaid in grain. Seed is sold to small farmers at excessive prices; and as it is difficult for them to clear themselves off the lender's books, a chronic state of poverty results, which, however, seldom reaches the limit of actual destitution. The Collector says: 'The Purniah *rayat* lives, and that is all. The profit of his labour eventually goes into the coffers of the lender of money and grain. The great mass of the *rayats* of Purniah do not possess occupancy rights, but hold on short-term leases, or on no leases at all.' The Collector estimates that occupancy tenants do not form more than a quarter of the peasantry of the District; and as regards those having rents protected from enhancement under Act viii. of 1869, he would say 'that not more than one-fourth of the occupancy *rayats* come under this class.' He is not aware that there are any small proprietors owning, occupying, and cultivating their hereditary lands, without either a *samíndár* above them or a subholder or labourer under them. This remark applies both to the revenue-paying and revenue-free land in the District. The Aráriyá officer reports on this subject that the proportion of the different classes of tenants in his Subdivision, in *parganá*s Sultánpur, Háveli Purniah, and Asjá, was, as far as he could judge, one-eighth holders at fixed rates, three-fourths occupancy tenants, and one-eighth

tenants-at-will. In Dharmpur, *silá* Birnagar, and Terakhardá, the whole of the tenantry are tenants-at-will. In Dharmpur, *silá* Garárl, half are occupancy tenants, and half tenants-at-will. In Srípur and Fathipur Singhía, one-eighth are occupancy tenants, and seven-eighths tenants-at-will. The Subdivisional officer of Aráriyá adds : ' In this Subdivision, almost every man whom I have assessed for the income tax, and a great many others of the better class of tenants, hold small *míls*, or rent-free holdings, averaging about ten local *bighás*, which they cultivate themselves.'

THE DOMESTIC ANIMALS of Purniah District are ponies, asses, buffaloes, cows, bullocks, sheep, goats, pigs, fowls, ducks, and geese. Those used in agriculture are buffaloes and bullocks. The foregoing are also reared for trade, those reared for food being cows, bullocks, sheep, goats, and pigs. Beef is eaten by the Musalmáns who can afford it; goats by both Musalmáns and Hindus; fowls by Musalmáns only; and pigs by very low castes, such as Hárís and Doms. I have already described the manner in which cattle are moved about during the year for the purposes of pasturage. Cows in full milk, however, are kept at home, until the quantity of milk is reduced to what is considered as sufficient only for the nourishment of their calves; but when the breed is good, very little milk is taken, almost the whole being left to the calf. The price of oxen has of late risen so much, that it is considered more profitable to breed and rear for sale than to seek profit from milk, butter, or *ghí*. Even in Dr. Buchanan Hamilton's time, during the rainy season, in *parganá*s Háveli Purniah and Náthpur, where the herds were immense, cow's milk was extremely scarce, and seldom sold, most of what could be spared from the calves being used by the families of the owners. This is still the case, the reason being that it is immediately after the rains that the young cattle are generally sold. Dealers, known as *lobánas*, come from other Districts and purchase largely. There are three breeds of oxen known in Purniah. The best is the Dhaphar breed, so called from the *parganá* of that name, now transferred to Bhágalpur. A medium description is called the Purniah breed. The worst kind comes from the *parganá*s included in the Krishna-ganj Subdivision, being the offspring of the overworked and ill-cared-for cattle of the Musalmáns of those *parganá*s. Buffaloes are the animals which chiefly supply the people of this District with butter. They are not in general so fine as those of the more eastern Districts, fewer of them being bred from wild bulls. Dr. Buchanan

Hamilton noticed the fact, that in the south-east corner of Purniah, towards Maldah, where no tame males were kept in his time, the buffaloes sold at from £3, 4s. to £4 a pair; while those that went to Murang, attended by tame bulls from the north, averaged no more than £2, 16s. od. Buffaloes are managed much in the same way as cows. In the rainy season they are kept in the villages; in the dry weather most of them are sent to Murang, or to the reedy banks of rivers, and they never receive any food except pasture. Many of the females, however, when in full milk, are kept at home, the people having little confidence in the honesty of those who tend them. Buffaloes are always reckoned by the pair, consisting of two adult females with their calves. The male calves are said to be considerably more numerous than the females; but they are usually killed when very young, very few being reserved for sacrifice or for labour. The female buffaloes, therefore, that have had male calves, give much more milk to their owners than those which have had females; the calves in the latter case being kept until they grow up, and allowed a great part of the mother's milk. Deputy-Collector Rajanináth Chattarjí has supplied me with the following estimate of the expense of keeping a herd of 40 pairs of buffaloes near Sáifganj, in *parganá* Katiyár, the centre of one of the chief breeding tracts:—Wages of two herdsmen, £1, 4s. od.; rice, 18 *mans*, £3, 4s. od.; 2 blankets, 12s.; 2 *dhúttis*, 2s. 6d.; 2 *kopins*, 1s. 3d.; salt for the buffaloes, one *man* of 80 lbs. weight (at the rate of one pound to each buffalo), £1, 10s. od.; bells to hang on their necks, 4s.; rent of grazing land, £6: total, £11, 17s. 9d. Out of the forty pair, thirty individuals are likely to be females yielding milk. Each buffalo gives a *ser* of milk daily, hence there will be 30 *ser*s of milk. Deducting 2 *ser*s as the share of the keepers, there remains 28 *ser*s to the owner; 28 *ser*s of milk at the rate of 12 *ser*s of milk to one *ser* of *ghí*, will yield 2 *ser*s 5 *chhataks* of *ghí*, the price of which is about 3s. Hence the monthly income is £4, 10s. od., or the annual income £54;

Sáifganj is the chief seat of the sheep-breeding trade. The *gareris* there principally rear the long-tailed and short-horned species called *garer*, which is said to have been brought into the District from the hilly country south of Monghyr. The ewes have their first lamb when two years old, generally in the month of October. They breed once a year, and very seldom have more than one lamb at a birth. They breed until seven years of age.

Each thus gives birth to 4 or 5 lambs. The males are gelded when 4 months old, and are sold when 2 years old, for about £3, 15s. od. a score, to dealers who come mostly from Murshidábád, whence they find their way to Calcutta, and all over Bengal. In March the lambs are shorn, and each gives $\frac{1}{4}$ *ser* of wool, which is much finer than subsequent shearings. The second shearing is in the month of June, and the third in October. The wool is sold at the rate of 3 *ser*s for 2s., and each sheep therefore yields annually sixpence worth. In Sáifganj there are about 10,000 breeding sheep. Every herd of 200 or 250 sheep is under two men, each man being paid 2s. a month, and getting besides his food, which costs 4s. more. The principal profit of the *gareris* is derived from the manufacture of blankets, which is described at a subsequent page. Each sheep gets monthly one *chhaták* or two ounces of *khari nimak*, a coarse kind of Glauber salts, which comes chiefly from Patná, but is also produced in Purniah. The price of a *man* of the salts varies from 3s. to 3s. 6d.

The Collector in 1872 returned the following prices of domestic animals:—A cow costs £1, 4s. od.; a pair of oxen, £3; a pair of male buffaloes, £3, 12s. od.; a pair of female buffaloes, £4, 10s. od.; a score of ewe sheep, £2, 10s. od.; a score of female kids six months old, £1; a score of male kids of the same age, £1, 10s. od.; a score of full-grown gelded pigs, £10; a score of sows, £4; and a score of young pigs six months old, £1, 10s. od. to £2. In 1811, Dr. Buchanan Hamilton made an estimate of the value of live-stock in the District of Purniah. Although the District is now about one-fourth smaller in area than it was at that period, it is probable that, with the increasing wealth of the country, this kind of property has increased not only in value but in number to the extent of 25 per cent. I have, therefore, accepted Dr. Buchanan Hamilton's estimate of the number of animals as approximately representing the number now existing in Purniah District, and have calculated their value according to the above return of the Collector as follows:—Number of bulls reserved for breeding, 6660, value £9990; bulls used for ploughing, 22,400, value £33,600; oxen used in wheel carriages, 1034, value £1551; oxen used in carts, 4500, value £6750; oxen used in carrying loads, belonging to traders, 27,150, value £40,725; oxen used for carrying loads, belonging to farmers, 9290, value £13,935; oxen used for carrying loads, belonging to the high castes, 2760,

value £4140; oxen used both in the plough and for carrying loads, 3200, value £9300; oxen used in manufacture, 5950, value £8925; oxen used in the plough alone, belonging to the high castes, 205,900, value £303,850; oxen used in the plough alone, belonging to tradesmen, 101,500, value £716,775; oxen used in the plough alone, belonging to mere farmers, 639,000, value £958,500; cows belonging to the high castes, 179,600, value £215,520; cows belonging to tradesmen, 196,200, value £235,440; cows belonging to farmers, 457,500, value £549,000; cows used in the plough, 57,750, value £69,300; buffaloes young and old, 70,475, value £194,473, 15s. od.; goats, full-grown females, 88,700, value £8870; sheep, full-grown, 21,350, value £2668, 15s.; short-horned sheep or *garer*, 13,000, value £1625; swine, 34,100, value £3410; horses for carrying loads, 3475, value £6950: total value of cattle, £3,391,762, 10s. od. The Collector does not think that even this immense amount of money represents the total value of the cattle of the District. He particularly points out that the number used in carts is probably very much greater than that above given. The quantity and value of milk produced annually in Purniah may be obtained thus:—Number of cows, 835,300; cows giving milk, 417,650; average rate, one *ser* a day, or 9 *mans* a year; total quantity of cows' milk, 3,758,850 *mans*; total value of cows' milk at the average wholesale rate of 20 *ser*s ($\frac{1}{2}$ *man* or 40 lbs.) per rupee, £751,770. Number of buffaloes, 71,425; buffaloes giving milk, 23,825; total quantity of buffaloes' milk, 214,425 *mans*; total value of buffaloes' milk, £42,885. Total milk of both kinds, about 141,902 tons; total value, £794,655. About one-third of the milk is made into *ghi*, which, at the rate of 3 *ser*s of *ghi* from 1 *man* of milk, gives 101,832 *mans*, or about 362 tons, as the annual amount of *ghi* produced.

THE AGRICULTURAL IMPLEMENTS in use in Purniah District are the following:—(1) *Koddli*, a kind of mattock used for digging up land. There are two kinds, one with a handle fifteen inches long, and the other with a longer handle, measuring twenty-four inches. (2) *Pasni*, a spud used for weeding and rooting out grass; it has a blade from three to four inches square, and a handle about six inches long, turned over at one end. (3) *Biddi*, a large rake drawn by cattle, and consisting of wooden spikes fixed in a transverse bar of wood to which a long handle is attached. (4) *Chauki*, a heavy beam of wood used as a harrow; while it is being drawn along, a

man stands on it, his weight adding to its force in breaking clods. (5) *Hdl*, the plough, which is made up of the *lagán* or handle held by the ploughman, the *phál* or ploughshare, the *jud* or *pálo*, the yoke to which the cattle are attached, and the *kanídl* or *sanídl*, wooden pins to keep the yoke straight. (6) *Kachíd* or sickle. (7) *Dagíd* or flail. For the cultivation of a 'plough' of land of ten to twelve *bighás*, equal to about four English acres, the foregoing implements and a pair of bullocks would be necessary. The bullocks would cost about £3; the plough complete, 2s.; the harrow or *chankí*, 2s.; a rake or *bidd*, 4s.; the spud for weeding or *pasní*, 3d.; the sickle or *kachíd*, 3d.; the hatchet or *korál*, 1s. Sixpence worth of rope would also be necessary, so that the total cost would be from £3, 10s. to £4.

WAGES. — The earliest record I have met with of the value of labour is contained in a letter of the Collector to the Board of Revenue, dated the 16th April 1788, in which he estimates the average earnings of the labouring classes at one rupee or two shillings a month. About 1811, Dr. Buchanan Hamilton made a statistical survey of Purniah. I have derived the following rates of wages from his report. The lowest class of farm labourers received 8 *ánnds* or 1s. a month, and 4 ozs. of cleaned rice a day. Such a labourer, however, was paid specially during the harvest time at the rate of $5\frac{1}{2}$ *sers* of unhusked rice, or 12 *mans* for three months; or for the whole year, 9s. in money and 14 *mans* of unhusked or 9 *mans* of husked rice, which would give him 2 lbs. a day for food. The rate for cowherds was much the same. They received 2 *ánnds* a month in money, and $\frac{1}{2}$ *ser* of rice daily for every six head of cattle tended. It was considered a full day's work for a man to tend 24 oxen, so that his monthly wages were 8 *ánnds* or 1s., and $\frac{1}{2}$ *ser* or 1 lb. of rice daily. Ploughmen were usually remunerated by being permitted to use the farmer's plough and cattle on their little plots of land during eight days in the month. The class of labourers who seem to have been best off were those who worked from day to day for hire. Their ordinary daily wages were three *pan* of *kaurís* or nine *pies* ($1\frac{1}{8}$ d.) a day in money, or three *sers* (six pounds) weight of unhusked rice. On the supposition that he could obtain labour only during nine months of the year, a man of this class would still receive 20 *mans* of grain, which would be much more than sufficient for his support. Female coolies were almost as well paid; but they, as well as the men, seem to have been very improvident, and usually so much in debt as to have to work on advances. A very strange rate of pay-

ment (which has now died out) was that given to Musalmán cooks. They received eight *ánnás* or one shilling for every *man* of 82 lbs. weight of rice boiled by them.

At the present day, coolies, other than agricultural labourers, are not to be had in the District. A few Dhángars come from the Santál Parganá, but, usually demand as much as 8s. a month. Agricultural labourers are paid 7s a month. About 1842 they received 3s. to 4s. a month, so that there has been a steady advance in the value of unskilled labour, the rate having increased, roughly speaking, about one hundred per cent. in a quarter of a century. Skilled labour, when employed by natives, is still generally paid in kind. Blacksmiths who know their work tolerably well go to the workshops of the East Indian Railway to seek employment, and it is very difficult to find in the District a man who can do more than make a ploughshare; such a man requires from 18s. to £1, 4s. od. a month. Carpenters can be more readily got for 12s. to 14s. a month, the employment afforded by the indigo factories having induced them to stay in the country. They also do a good business in making carts and other conveyances. Bricklayers receive about 8s. to 10s. a month. All these artisans are usually paid in kind when employed by their fellow-villagers. Their wages also have risen of late, as ten years ago carpenters could be had for 8s. and bricklayers for 6s. per mensem. The Subdivisional officer of Aráriyá, in 1873, reported that within his jurisdiction labour was abundant and cheap. Working in the fields or thatching houses, or doing any ordinary work for six hours, entitles a labourer to 3 *ser*s of unhusked rice and one of his *neals*, equivalent in money value to 4 *pie* or 1½d. Those who work for twelve hours in the day get twice as much. The village blacksmith receives yearly two *mans* of unhusked rice for each plough kept in working order, the materials for repair being provided by the owner. For making a well, potters or *kumbhárs* (two of whom sink and fit in the ring to a depth of 15 or 18 feet in two days) charge 6s. or 8s. These wells do not last beyond two or three years, as the rings apparently are not made of good clay, and perhaps are not sufficiently burnt. The village barber is also paid in unhusked rice, of which he receives 5 *ser*s from each person. The washerman, where he exists, takes either cash payment; or on an average 5 *mans* (or about 3½ cwt.) of unhusked rice a year from each household. Work done by contract, such as excavating for road embankments, tanks, etc., is paid for at

from 2s. to 4s. per 1000 cubic feet. Brick-making is especially cheap, as Nepáls from across the frontier engage to mould and burn them whenever required, the wood being supplied and badly-burned bricks discarded, at 4s. per thousand. Land agency servants are liberally remunerated, *patwáris*, or rent collectors, receiving 1 *ánná* for every rupee of the villagers' rent, besides what they extort. *Mukaddams*, or head-men, who receive the money from the *patwáris* to make over to the *zamíndár*, are in *parganá* Sultánpur paid a fixed salary of from 8s. to 12s. a month. Messengers, or *piyáds*, are also paid by the *zamíndár*, perhaps 4s. a month. The *goráit*, or office watchman, the only hereditary servant in the management, generally holds a few *bighás* of rent-free land. The *srímán* in *parganá* Srípur is identical with the Sultánpur *mukaddam*, but receives no regular pay.

PRICES.—I have been able to find little information regarding prices in the early records. Regular fortnightly returns to Government seem to have been made, as at the present time, but the original office copies have been all destroyed. In 1794, however, the Collector reported in connection with the purchase of some grain for Government storage, that, 'in Purniah District; there are only two rice harvests in the course of the year, namely, *bhadaí* and *aghani*. The former is not above half as productive as the latter; the grain yielded therefrom is of a very inferior quality, and held in no estimation by the natives, but for the support of the very lowest and poorest classes of the inhabitants, and feeding cattle. The *aghani* crop is quite the reverse, bears a higher price, and is sought after and purchased by all descriptions of merchants, as well for its superior quality as the length of time it will keep good; whereas the *bhadaí* grain begins to decay, it is said, after one year's keeping. The *bhadaí* rice, when cleaned, sells at 2 *mans* 10 *seers* per rupee (or 1s. 2¾d. per cwt.); unshelled *bhadaí dhán* or rice, at 4½ *mans* per rupee (or 7½d. per cwt.); *aghani* rice, cleaned, at 2 *mans* per rupee (or 1s. 4¾d. per cwt.); unshelled *aghani* rice, 4 *mans* per rupee (or 7½d. per cwt.). *Arúah*, or fine rice, one rupee per *man* (or 2s. 9½d. per cwt.).' He adds: 'Wheat is another commodity, the produce of this District, that is greatly sought after by all classes of people, and is generally very cheap and moderate. If the Governor-General in Council thinks proper to direct, 25,000 *mans* (or 893 tons) of it can be purchased without the smallest risk or difficulty. The price is generally from 2 to 2 *mans* 10 *seers* per rupee (or 1s. 4¾d. to 1s. 2¾d. per cwt.).'

The Subdivisional officer of Aráriyá, in 1873, reported that within his jurisdiction prices of food-grains, and all kinds of agricultural produce, have fallen considerably since 1866, the year of the great famine in Orissa. The average of the rates for the whole District shows that during that year the best cleaned rice was selling at 11s. 2½d. a cwt., or Rs. 4 a *man* of 82 lbs.; coarse rice, at 9s. 6d. a cwt., or Rs. 3½ a *man*; fine unhusked rice, at 6s. 10d. a cwt., or Rs. 2½ a *man*; coarse unhusked rice, at 6s. 7½d. a cwt., or Rs. 2 a *man*; barley, at 6s. 10d. a cwt., or Rs. 2½ a *man*; unhusked barley, at 5s. 7½d. a cwt., or Rs. 2 a *man*; Indian corn grain, at 5s. 7½d. a cwt., or Rs. 2 a *man*; Indian corn in the ear, at 2s. 9½d. a cwt., or R. 1 a *man*; wheat, at 11s. 2½d. a cwt., or Rs. 4 a *man*; sugar-cane, at 9s. 6d. a cwt., or Rs. 3½ a *man*. In 1872 the prices were—for best rice, 2s. 9½d. a cwt., or R. 1 a *man*; common rice, 2s. 0½d. a cwt., or 12 *ánnás* a *man*; best unhusked rice, 1s. 2½d. a cwt., or 7 *ánnás* a *man*; common husked rice, 1s. 0½d. a cwt., or 6 *ánnás* a *man*; barley, 1s. 8½d. a cwt., or 10 *ánnás* a *man*; unhusked barley, 1s. 4¾d. a cwt., or 8 *ánnás* a *man*; Indian corn grain, 2s. 4½d. a cwt., or 14 *ánnás* a *man*; Indian corn in the ear, 1s. 4¾d. a cwt., or 8 *ánnás* a *man*; wheat, 2s. 9½d. a cwt., or R. 1 a *man*; sugar-cane, 6s. 10d. a cwt., or Rs. 2½ a *man*. The price of *tári*, the fermented juice of the palm tree, has remained stationary throughout the whole period, and sold without variation at a little more than a penny a quart, or 1½d. a *ser* of 2 lbs. In the last week of December 1875, after the *agharí* or main harvest of the year had been gathered, the prices of food-grain in the city of Purniah, and at the large mart of Kásbá, were at the following rates:—Purniah city, best rice, 5s. 7½d. per cwt., or 20 *ser*s per rupee; common rice, 4s. 10¾d. per cwt., or 23 *ser*s per rupee; wheat, 4s. 8d. per cwt., or 24 *ser*s per rupee. Kásbá, best rice, 5s. 7½d. per cwt., or 20 *ser*s per rupee; common rice, 5s. 4d. per cwt., or 21 *ser*s per rupee; wheat 5s. 7½d. per cwt., or 20 *ser*s per rupee.

THE WEIGHTS AND MEASURES in use in Purniah District are exceedingly various. The standard *man* of 82 lbs. avoirdupois is occasionally met with in buying and selling by weight. Its minor denominations are:—4 *chautís* = 1 *chhaták* or 2 ozs.; 4 *chhatáks* = 1 *podá*; 4 *podás* = 1 *ser*, or 2 lbs. 14 drs.; 5 *ser*s = 1 *paserí*; 8 *paserís* = 1 *man* or *maund*. The *ser* is most commonly estimated in *toldás*, 80 of which go to the standard *ser* of 2 lbs. 14 drs. weight. The number of *toldás* in a *ser*, however, varies very much in Purniah, from

64 to 105 being found in different parts of the District. The following return for each *parganá* has been supplied to me by the Cóllector:—Asjá, 80 *tolás* to the *ser*, principal market at Rotá; Badaur, 80, 85, and 105 *tolás* to the *ser*—80 *tolá ser* in use at Barsol, the chief market; Bhonrá, 80 *tolás* = 1 standard *ser*; Burigangal, 96 *tolás* to the *ser*; Chak Diláwarí, 96 *tolás* to the *ser*; Dharpur, 64 and 72 *tolás* to the *ser*—the 72 *tolá ser* used at Dúmar, the chief market; Diláwarpur, 96 *tolás* to the *ser*; Fathipur Singhiá, 80 *tolás* to the *ser*; Garhi, 96 and 105 *tolás* to the *ser*; Hatandá, 80, 96, and 105 *tolás* to the *ser*; Háveli Purniah, 80 and 85 *tolás* to the *ser*—the former weight used at Phúlwarí, the principal market; Kadabá, 80 and 85 *tolás* to the *ser*—the former used at Kúmshí, and the latter at Azímnagar, the principal markets; Kánkjol, 80, 96, and 105 *tolás* to the *ser*—the 105 *tolá ser* in use at Muhadahpur, the principal market; Katiyár, 72 *tolás* to the *ser*—the same weight used at the principal markets of Kumáripur and Sáifganj; Kholrá, Máldawár, Pawákháíl, Sháhpur, and Sripur, 80 *tolás* to the *ser*; Sultánpur, 64 and 80 *tolás* to the *ser*; Surjyapur, 80 *tolás* to the *ser*—the same weight used at Krishnaganj and Káliáganj, the principal markets; Tájpur, 80 *tolás* to the *ser*; Terakhardá, 64 and 80 *tolás* to the *ser*. The Collector states generally that the 105 *tolá ser* is used in the south-east of the District, near the Ganges, in *tháná* Manihárl. The 96 *tolá ser* is used in the same neighbourhood, and farther north. The 80 *tolá ser* is used generally in the Krishnaganj Subdivision. The 72 *tolá* weight is employed in Dharpur, Katiyár, and Kumáripur. In the north-west of Dharpur, and in the western parts of Terakhardá and Sultánpur, *i.e.* round the villages of Matiyárl and Rániganj, the 64 *tolá* weight is used. The 85 *tolá ser* is used in the large rice-mart of Kásbá, and in some villages in the east of the District.

Hay and grass measures are:—16 *poars* or bundles = 1 *sorí*; 16 *sorís* = 1 *soraha*. The measurements of distance are:—4½ *háths* = 1 *káthá*; 20 *káthás* = 1 *ras*; 85 *ras*s = 1 *kos* or 2 English miles; 10 *kos* = 1 *manzal*. The denominations of the standard measure of area are:—4½ *háths* = 1 *káthá* or *lagá*; 20 *káthás* or *lagás* = 1 *bighá* or ½ of an acre; but in every *parganá* the number of *háths* to the *lagá* varies, and in some of these divisions as many as twenty different *lagás* are in use. Varying standards are often met with in neighbouring villages, and sometimes in the same village. The following is a list of the different poles in each *parganá*:—Asjá,

4, 5, and 6 *háth* to the *káthá*; Badaur, $4\frac{1}{2}$ and 5 *háth*; Bhaura, 4 *háth*; Burigangal, 4 *háth*; Chak Diláwarí, 4 *háth*; Dharpur, $5\frac{1}{2}$ and 6 *háth*; Diláwarpur, 4, $4\frac{1}{2}$, and 5 *háth*; Fathipur Singhiá, 5 and 6 *háth*; Gagrá, 4 *háth*; Garhi, $4\frac{1}{2}$ *háth*; Garárl, 6 *háth*; Hatandá, 4 *háth*; Háveli Purniah, $4\frac{1}{2}$, 5, and 6 *háth*; Kadbá, $3\frac{1}{2}$, $3\frac{3}{4}$, 4, $4\frac{1}{4}$, $4\frac{1}{2}$, $4\frac{3}{4}$, 5, $5\frac{1}{2}$, $5\frac{3}{4}$, 6, $6\frac{1}{4}$, $6\frac{1}{2}$, $6\frac{3}{4}$, 7, $7\frac{1}{2}$, $7\frac{3}{4}$, 8, and 9 *háth*; Káakjol, 4 *háth*; Kasimpur, 4 *háth*; Katiyár, $3\frac{1}{2}$, $3\frac{3}{4}$, 4, $4\frac{1}{4}$, $4\frac{1}{2}$, $4\frac{3}{4}$, 5, $5\frac{1}{2}$, $5\frac{3}{4}$, 6, $6\frac{1}{4}$, $6\frac{1}{2}$, $6\frac{3}{4}$, 7, and $7\frac{1}{2}$ *háth*; Kholrá, $4\frac{1}{2}$ and 5 *háth*; Kharibá, $4\frac{1}{2}$ *háth*; Kumáripur, $3\frac{1}{2}$, $3\frac{3}{4}$, 4, $4\frac{1}{4}$, $4\frac{1}{2}$, $4\frac{3}{4}$, 5, $5\frac{1}{2}$, $5\frac{3}{4}$, 6, $6\frac{1}{4}$, $6\frac{1}{2}$, $6\frac{3}{4}$, and $7\frac{1}{2}$ *háth*; Mahínagar, $4\frac{1}{2}$ *háth*; Mál-dawár, 4 and $4\frac{1}{2}$ *háth*; Pawákhálli, 6 *háth*; Sháhpur, 5 *háth*; Srípur, 5 and 6 *háth*; Sultánpur, $4\frac{1}{2}$, 5, and 6 *háth*; Surjyapur, 5 *háth*; Tájpur, $4\frac{1}{2}$, $4\frac{3}{4}$, 5, $5\frac{1}{2}$, $5\frac{3}{4}$, and $7\frac{1}{2}$ *háth*; Tappá Lakhpúra, 4 *háth*; and Terakhardá, 6 *háth*. The *bighá* measured by the $3\frac{1}{2}$ *háth* pole is equal to 1225 square yards, or $\cdot 253$ of an acre; measured by the $3\frac{3}{4}$ *háth* pole is equal to 1406 square yards, or $\cdot 288$ of an acre; the 4 *háth* or standard Bengal *bighá* is equal to 1600 square yards, or $\cdot 33$ of an acre; the $4\frac{1}{4}$ *háth* is equal to 1806 square yards, or $\cdot 373$ of an acre; $4\frac{1}{2}$ *háth*, which is very common in Purniah, is equal to 2025 square yards, or $\cdot 418$ of an acre; $4\frac{3}{4}$ *háth* is equal to 2256 square yards, or $\cdot 466$ of an acre; 5 *háth* equal to 2500 square yards, or $\cdot 516$ of an acre; $5\frac{1}{2}$ *háth* equal to 3025 square yards, or $\cdot 625$ of an acre; 6 *háth*, also very commonly used, equal to 3600 square yards, or $\cdot 744$ of an acre; $6\frac{1}{2}$ *háth* equal to 4225 square yards, or $\cdot 873$ of an acre; 7 *háth* equal to 4900 square yards, or $\cdot 1012$ acre; 9 *háth* equal to 8100 square yards, or $\cdot 1673$ acre. The local measures of time, besides the usual divisions of day, month, year, etc., which are the same in native as in English calculation, are as follows:—6c *pál* = 1 *danda*; 120 *danda* = 1 *gharí*; 3 *gharí* = 1 *prahar*; 4 *prahar* = 1 day.

LAND TENURES.—The following account of the different kinds of tenures in Purniah District has been condensed from a report on the subject by Deputy-Collector Bábu Rajanináth Chattarjī. The various forms of land tenure prevailing are, for the most part, precisely the same as in neighbouring Districts, in the Accounts of which I have fully described them. In the present case, therefore, I have confined detailed description to the few cases where tenures present characteristics distinct from those observed elsewhere. All tenures may be divided into two classes—those paying revenue or rent, and those exempted from such payment. The following

twenty varieties of revenue and rent-paying tenures are met with in Purniah :—

(1) The *zamíndárí* is an estate of the first degree, an absolute right of proprietorship in the soil, subject to the payment of a fixed amount of revenue to Government. If this revenue fall into arrears, the estate may be put up to auction and sold to the highest bidder. The purchaser acquires the estate free of all encumbrances created since the Permanent Settlement, and obtains a statutory title. A *zamíndárí* is hereditary according to the law of succession by which the proprietor is governed. It is assignable in whole or in part. It may be mortgaged. The *zamíndár* can grant leases either for a term or in perpetuity. He is entitled to rent for all land lying within the limits of his *zamíndárí*; and the rights of mining, fishing, and other incorporeal rights are included in his proprietorship. The Decennial Settlement of Purniah, which was concluded in the year 1790, when Mr. Heatly was Collector, and Mr. Colebrooke, who carried out the measure, Assistant-Collector, was made with the *zamíndárs* for entire *parganá*s or fractions of *parganá*s. The number of estates at that time was 211; but the number now borne on the *tauzí* or revenue-roll is 1629, consisting of 211, the number at the period of the Decennial Settlement, minus 3 struck off on account of diluvion, and 158 transferred to other Districts, leaving 50 old estates; 1550 resumed revenue-free estates; 25 new estates, formed under the operation of the Partition Law—13 in permanently settled estates, and 12 in resumed ones; 1 new estate, acquired by purchase; 1 acquired by alluvion; and 2 estates transferred from other Districts. Of these 1629 estates, 28 are the property of Government, of which 3 were acquired by escheats, 1 (called Inglis Khopákattí, in *pargana* Kánkjol) by purchase from a landholder for the settlement of native invalid troops, and 24 by purchase at auction sales for arrears of revenue. The revenue of these 28 estates is £368, 9s. 11d. The following classification of the estates in Purniah District is taken from the Quarterly Land Revenue Return of the 30th June 1875 :— There are 230 permanently settled estates paying more than £10 in revenue, and yielding a total revenue of £135,448, 16s. od.; 1351 permanently settled estates, paying £10 and less, and yielding a total revenue of £4789, 8s. od.; 15 estates the property of individuals temporarily settled or farmed, and yielding a total revenue of £161, 2s. od.; 5 estates held under the direct management of

the Collector, and yielding a total revenue of £21, 18s. od.; 5 Government estates under temporary lease, and yielding a total revenue of £6, 8s. od.; and 22 Government estates under direct management, and yielding a total revenue of £330, 18s. od. Of the 1550 resumed revenue-free estates, 1527 were settled at half-rates in perpetuity with the proprietors, agreeably to section viii. of Regulation xix. of 1793. These resumptions were made between the years 1836 and 1846. The number of partitions of estates-in-chief that have taken place in this District is only 15, and the number of separate accounts opened under Act xi. of 1859, 46.

When the Permanent Settlement became law, the District was divided as follows amongst the chief landholders:—Rání Indrabati of Mohini, near Káshá, was *zamíndár* of *pargánás* Sultánpur, Srípur, Fathipur Singhiá, Háveli, Katiyár, Kumáripur, Garári, and Náthpur (the last of which is now transferred to Bhágalpur). These *pargánás* comprise about 2000 square miles. Rájá Madhu Sinh of Darbhághah was *zamíndár* of Dharpur, which occupied an area of 1063 square miles, or one-fifth of the whole District. Takír-ud-dín Husáin held *pargána* Surjyapur, which is 726 square miles in area. Baka-úllá was *zamíndár* of Badaur, which is 295 square miles in area. Sibnáth and Gauri Náth were joint-proprietors of Táppur, which is 180 square miles in area. Dular Sinh, the grandfather of Rájá Nílanand Sinh, at present one of the largest landholders in the District, was *zamíndár* of Terakhardá, which has an area of only 76 square miles. The assessment seems not to have exceeded the capabilities of the estates, as most of the larger ones have not changed hands, but still continue in the possession of the descendants of those with whom the Settlement was made. The only large property that has been broken up is that of Rání Indrabati. In 1850, Bábu Pratáp Sinh, father of Rái Lakshmi-pat Sinh and Rái Dhanpat Sinh of Murshidábád, purchased the whole of *pargánás* Háveli Purniah and Sultánpur, and about half of *pargánás* Fathipur Singhiá, Srípur, Katiyar, and Kumáripur; the late Mr. Palmer of Purniah acquiring the remaining portions of the last-named *pargánás*. Rájá Nílanand Sinh purchased Garári. Bábu Pratáp Sinh subsequently sold Sultánpur to Mr. Forbes, the present *zamíndár*.

(2) *Tálúks* are met with in Purniah District, but they are not so numerous as in Bengal, and are all dependent, or *shikmí*. The absence of *huzúrí* or independent *tálúks* is accounted for by the fact that, at the time of the Permanent Settlement, the *parganá* system

had not been broken up, as had been the case, for instance, all over the Rájsháhí Division; and Government was able to make its assessments and settlements on the well-marked lines afforded by the *parganá*, or original fiscal unit. The same reason is given for the absence of *taufir* or incremental estates. Although very large tracts were unreclaimed, and in fact had not been assessed, they lay, unfortunately for the revenue, within recognised areas, and the advantages of their cultivation went to the landholders. In much of Lower Bengal, on the other hand, waste land lay for the most part outside the *samíndáris* limits; and when the landholders began to reclaim and absorb these tracts, Government was able to intervene and assert its rights to a fair share in the proceeds of such land. Dependent *tálúks* are usually of the *istimráris* species; that is, farms or leases granted by the landholder in perpetuity at a fixed stipulated rent; and often, in cases where the lessee was a relative, favourite, or old servant of the lessor, at a quit rent. In this District they are of comparatively old origin. Some of the *istimráris* were granted by the Nawábs of Purniah; and several, it appears, were created or confirmed by a farmer of the District revenue, Achinta Rái, about 1771, shortly after the assumption by the Company of the management of the revenues. The *kánúgos* of each *parganá* usually held one or more *istimráris* from the *samíndárs*. Gopikánt Rái, a Bengálí of Kántanagar, near Kárágolá, was *kánúgo* of Dhámpur in 1799 and held five or six *istimráris*. Harichand Rái Lálá, a Káiyásth and *kánúgo* of Náthpur and Garárl, acquired two or three. These tenures are all hereditary and transferable, and not resumable by the grantors; but they are liable to be cancelled by purchasers of parent estates at sales for arrears of revenue, if not specially registered under the provisions of Act xi. of 1859. They are most numerous in the *pargánas* of Háveli, Dhámpur, Fathipur Singhiá, and Srípur. The following are some of the largest *istimráris* in the District:—*Táluk* Vishnupur, in *parganá* Havéli, paying in rent £206, 8s. od. It was granted to Aga Muhammad Alí Khán, the last native magistrate of Purniah, and grandfather of Aga Saib-ullá Khán, the leading Musalmán gentleman in the town of Purniah at the present day. From the copy of the *sanad* filed in the Collectorate, it would appear to have been granted by Achinta Rái, the farmer. It is more probable that it was only confirmed by him. *Táluk* Gohoma, in *parganá* Háveli, paying in rent £236, 8s. od., and at present held by Mr. Forbes of Sultánpur.

Táluk Perwá- and Ramá, in *parganá* Sultánpur; rent, £224, 16s. od. The total number of *istimráris* in the District, as far as can be gathered from the Road Cess Records, is 263, of which 248 are held directly from the *zamíndárs*, and 15 from *patnídárs* or other subordinate landholders. All arrears of rent due from holders of *istimráris* are realized by a recourse to the Civil Courts under Act viii. (N.C.) of 1865, and Act viii. (N.C.) of 1869, except on the estates of Rái Dhanpat Sinh and Rái Lakshmipat Sinh, the balances on account of which are realized, as in the case of *patnis*, by the summary process prescribed by Regulation viii. of 1819. Ráhu Pratáp Sinh, on purchasing the estates of Rájá Bijái Gobind Sinh of Sáifganj at auction sale, tried to annul and avoid the *istimráris* and *mukarraris* previously created; but afterwards came to terms with the holders of those tenures, on their entering into an agreement to submit to the same summary process for realization of rent as is prescribed for *patnis*. When an *istimrári* is sublet in perpetuity, it is called, in Purniah, not a *dar-istimrári*, but a *patni*. In fact, the word *patni* seems to be loosely applied to any tenure created in perpetuity.

(3) *Nánkár Táluks* are tracts of land originally exempted from assessment during the Mughul administration, being intended for the support of the *zamíndárs* and their families. They are confined to *parganá*s Srípur and Surjyapur, and consist of the following holdings, as ascertained from the Quinquennial Register of 1798:—(1) Mauzá Banúgarh, *nánkár* of Tilaknáth Rái, in Srípur, measuring 1178 local *bighás*, and supposed to yield a profit of £18 a year. (2) Mauzá Sungsea, *nánkár* in Srípur, measuring 1080 local *bighás*, and yielding a profit of £19 a year. (3) *Nánkár* of *zamíndárs* of Barhampur and Khagra, in Surjyapur, measuring 605 local *bighás*, producing £240 a year in rents. (4) *Nánkár* for the Nízat Khagra family in Surjyapur, measuring 500 local *bighás*, and yielding a rental of £275. None of these are assessed to Government revenue, as they were included within *parganá* estates.

(4) *The Patni Tenure* was introduced into Purniah about the year 1838, by the *zamíndárs* of Jamuikándi in Murshidábád, now known as the Paikpára family, when their estate of Raghupur Rauná in Dharrampur was let out as a *patni táluk*. Raghupur Rauná formerly belonged to Rájá Madhu Sinh of Dharrampur, but was sold for the recovery of arrears of revenue in 1790; and as sales were then held in Murshidábád, it came into

the hands of its present owners. A peculiarity attaches to this property, in that arrears are realized by a civil suit, and not by the summary procedure prescribed by Regulation viii. of 1819. This is owing to an erroneous notion that the *patní* law is not applicable to a purely *fasl mahál* or Behar estate, such as Dharmpur. Subsequently, Bábu Pratáp Sinh, also of Murshidábád, sublet his Purniah estates in *patnis*, so that the *patní* system seems to have owed its origin to absenteeism. A few only of the resident *zamíndárs* have let their estates in *patní*; most of them sublet their estates on leases, under the *mustájiri* system, for periods varying from five to nine years. The total number of *patnis* in Purniah is 409. They are most numerous in *pargandás* Háveli, Badaur, Srípur, Sultánpur, and Kadbá. Thirty-nine *patnis*, in nine parent estates, have been registered under the provisions of Act xi. of 1859. The main condition in the tenure is, that in the event of arrears occurring, the tenure may be sold by the *zamíndár*; and if the sale proceeds do not liquidate the debt, the other property of the defaulting *patnidár* is liable for it. These tenures are transferable, answerable for the personal debts of the *patnidárs*, and subject to the process of the Courts of judicature in the same manner as other real property, without, however, in any way prejudicing the rights of the *zamíndárs*. All transfers of *patní taluks* must be registered in the *zamíndár's* office. *Patnidárs* may under-let, but such leases are not binding on the superior landholder in the event of the tenure being sold for arrears.

(5) *Darpatnis* and (6) *Sepatnis* are under-tenures created by a *patnidár*, by which he transfers his own rights in the whole or part of his *taluk*. A *patní* of the second degree is called a *darpatní*; a similar under-tenure created by a *darpatnidár*, or a *patní* of the third degree, being called a *sepatní*. Regulation viii. of 1819 secures for both these sub-tenures the same rights and immunities as attach to *patnis* themselves, 'in so far as concerns the grantor of such under-tenures,' and contemplates similar advantages as accruing to *patnis* of the fourth degree, or *chárpatnis*—a tenure, however, which is hardly ever met with, and does not exist in Purniah. In case the proprietor of the superior *patní* withholds the rent due from himself to the *zamíndár*, the holders of these secondary tenures were liable to have all their rights cancelled, although they might have paid their own rents to the *patnidár*. In order to prevent frauds of this kind, the under-holders are now allowed to advance the amount of rent due to the *zamíndár*, which is then considered

a loan to the *patnidār*, and constitutes a lien on his *tdluk*, in the same manner as if it had been made upon mortgage; and the under-tenure holders may apply for immediate possession of the *patni* of the defaulter, and recoup themselves from its profits. The *patni* is not returned to the original holder till he proves, in a regular suit to be instituted for the purpose, that he has repaid the loan, or that it has been realized from the usufruct of the tenure. These tenures are numerous in *pargands* Haveli and Badaur. The first *darpatni* dates from the year 1854, and the first *sepatni* from 1871.

(7) *Mukarrari* and (8) *Maurusi jots*, and (9) *Kashts*, are the names now applied to a single description of tenure. They are all held at a fixed rent, and are hereditary and transferable. The rent paid, even when first fixed, was usually lower than that customary in the *pargand* or *mauza* to which they belonged. This advantage was often granted as an inducement to bring more land under cultivation; favourable terms were also given to relatives, or out of charity. These tenures were all protected from cancelment on the occurrence of a sale for arrears of revenue. *Mukarrari jots* were not originally hereditary, but have become so in process of time. Fixity of rent does not seem to have been an original condition of *maurusi* and *kasht* tenures, but is apparently an accident, which has subsequently attached to them. The Road Cess Returns show the number of *mukarraris* in the District to be 31, of which 14 are held directly under the *zamindars*, and 17 under *patnidars* or others. These tenures are found in *pargands* Haveli, Sripur, Fathipur Singhia, Badaur, Tajpur, and Dharmpur, and are generally small. The highest known annual rent of a *mukarrari jot* is £36, 2s. od.

The Commissioner of the Bhagalpur Division wrote in 1873: 'A very conspicuous fact in the land history of this Division, the greatest proportion of which consists of permanently settled estates, is that there are but very few intermediate permanent rights between the *zamindar* and the cultivating *rayat*. *Zamindaris* are generally let in short leases to farmers, who try to make as much as they can during the time of their incumbency, and never think of improving the condition of the tenantry and the land. Except under most peculiar circumstances, lands or estates are never given in *mukarraris* or *patnis* throughout these Districts, except in Purniah, where, I believe, the number of permanent intermediate rights is slowly increasing, though even there no great complication of rights

and interests appears to exist.' The number of permanent under-tenures of all kinds is, according to the Road Cess Returns, only 1031, as against 2378 farming leases.

(10) *Mustájirs* and (11) *Muttahids* are the names for all the tenures held on contract by professed middle-men between the original landholder and the peasantry. These two classes of rent-farms differ only in the extent of the area farmed, the status of a *muttahid* being higher than that of a *mustájir*. A *muttahid* is often the holder of a lease of a *parganá*; the term of his lease is usually nine years, and is never known to have exceeded twenty-one years. These tenures seem to be in accordance with old unwritten custom, existing long before the commencement of the English rule. The origin of a *muttahid* lease is often as follows:—After a *zamindár* has given leases of his estate to several persons, he again wants to raise money. He then lets the whole estate to one person, who is called a *muttahid*, on the receipt of a fresh sum in ready cash, the smaller farmers paying their rents to the new lessee. Neither a *muttahid* nor a *mustájir* can appoint or remove *patwáris*, *mandals*, or *goráíts*; nor can he dig tanks or cut down trees without the permission of the landholder. In fact, the difference between the rights of *mustájirs* and *muttahids* and those of *patnidárs* and *istimráridárs* is, that the former cannot do any act the effect of which may last beyond the term of the lease, while the latter occupy exactly the place of the *zamindár*.

(12) *Gáchbandi* is the name of a tenure which is very commonly met with in *parganá* Surjapur, and almost nowhere else. It was in force there from before the time of the Permanent Settlement, and owes its origin to the reclamation of the jungle lands taken from the *Nepális* about the middle of the eighteenth century. In this tenure the landholder lets a piece of land in farm for from five to seven years, for a fixed sum, without any assessment founded on the ascertained capabilities of the fields composing it, or on their area. In process of time these farms, as, in the English sense, they may be called, came to be grouped into *táluks*. The landholder, therefore, has now to deal either directly or indirectly with two classes of holders, known as *mustájirs* and *málgúzárs*. The former take leases of *táluks*. The latter lease single *gáchs*, which are then called *khárijá* or *neaját khánagí gáchs*—that is, separated from the *táluks*. The *gáchdár*, who is generally a resident of the village, sublets the lands to *thikádárs* or *kúldáits*, who are also of the same village, keep-

ing in his own possession a portion of the lands, which he cultivates with hired labour. From the Road Cess Records it appears that there are 944 *mālgúzdrs*, and 132 *mustājirs*, in Surjyapur, holding directly from the *zamíndárs*. The *mauguzárs* assess the rent on the lands let to *thikádárs* or *kúldáts*, not by ascertaining the area held by each, but by the quantity of seed required to be sown in each field; for instance, if a field requires 8 *seers* or 16 lbs. of seed, it will pay ordinarily 8 *ánnás* or one shilling in rent. This has been found in practice to be nearly equivalent to one rupee per standard *bighá*, or 6s. an acre. The immediate subholders of the *mustājirs* are called *mālgúzárs*, as well as *gáchdárs*.

(13) *Resumed Jágir Lands* are only found in the *parganá*s situated along the Nepál frontier,—Sripur, Fathipur Singhia, and Sultánpur. They were originally rent-free, and were given for the performance of certain services, such as the prevention of the incursions of wild elephants, pigs, and tigers, coming from the Murang or *tarái* upon the cultivated lands of the District. They were held by people of the Rájbangs caste, who were called *sardárs*. When the performance of the service for which the lands were granted was no longer required, the holders were assessed with rent. This took place before the Decennial Settlement. The following are the largest *jágirs* in the District :—(1) *Jágir Padampur*, in *parganá* Fathipur Singhia, paying a rent of £67, 16s. od., and still in the hands of *sardárs*. (2) *Jágir Putimárl*, in Sripur; rent, £115; no longer held by the descendants of the original grantee, having been bought by a Muhammadan. (3) *Jágir Phikú*, in Sultánpur; rent, £110; now held by Mr. Forbes, who bought it at an auction sale in execution of a Civil Court decree. A considerable *jágir* was attached to Táluk Ramái, in *parganá* Sultánpur, called Táluk Píprá, and was conferred on one Mír Sáyyid Alí, a native of Gúlastán in Persia, in consideration of his keeping up a body of men for guarding the northern frontier. The total number of *jágirs* shown by the Road Cess Records is 41, of which 35 are in *parganá* Surjyapur. Of these the largest are—(1) *Jhútákhar*; rent, £17, 12s. od. (2) *Shápniklá*; rent, £8, 16s. 10½d. (3) *Dhanígáon*; rent, £3, 14s. 3d. (4) *Dúhúsadhú*; rent, 13s. 6d. (5) *Panah Mauzá*; rent, £1, 14s. 9d. All of these seem rather to have been given by the *zamíndárs* to old servants as rewards for past services, than with the object of securing new dependents.

(14) *Kámat* is the name given to the lands which the *zamíndár*,

or other superior landholder, retains for his private use, and which he cultivates either by hired labour or by tenants-at-will. Such lands are called *khámár* in the east of the District.

(15) *Jót Jamá* is the general name for the holding of an ordinary cultivator. In Purniah District fixity of tenure attaches to most of these holdings. Occupancy *jóts*, as they are called, are hereditary but not transferable, except with the consent of the superior holder.

(15) *Hálhasli Jót* is a species of occupancy *rayatí*, or cultivating tenure, prevalent on the banks of the Kúsi and the Ganges in the *paragánas* of Dharmpur, Garhí, Chak Diláwarí, and Kánkjol, but unknown in other parts of the District. Its peculiarity is that the *jamá* or rent is ascertained every year after the measurement of the lands cultivated, according to the current rates, called *berá*, for each crop, which are given subsequently under the head of Rates of Rent. The measurement is made after the crop is reaped, and is generally carried on from the month of January (Mágh) to March (Chaith) by an *amín* or surveyor on behalf of the landlord, and the village *patwári*, in the presence of the cultivator. If the landlord fail to measure the lands after the crops have been cut, and ascertain the rent according to the nature of the crop grown on each plot, he can recover only as much rent as he got in the previous year. If he neglects to measure the land for a number of years in the same way, he can claim only the rent of the year in which the lands were last measured. The rent of each holding is fluctuating, and increases or decreases every year according to the area cultivated. If a tenant holds 30 acres and cultivates only 20, allowing the rest to remain fallow, he pays rent for the cultivated 20 acres according to the crop sown in them; and for the fallow land he pays at the rate which he had paid for the same land in the previous year, or according to the rate for fallow land specified in his lease, when there is a condition to that effect. Even if the whole 30 acres be left fallow, in which case the landlord receives very little rent, he cannot let the lands to another, nor demand more for the fallow than the lease or the customary rate or *berá* allows. The tenure is not generally transferable by sale, unless there is a special custom to that effect in the village in which the land lies. Several tenures of this kind are, however, known to have been sold in execution of Civil Court decrees. They can be sublet, but this is not generally done. The holders are usually Bráhmans, Rájputs, and the members of the higher castes, as well as Musalmáns. Few or none of the lower castes hold these tenures,

which are considered to be of old origin. Now-a-days, on the banks of the Ganges and the Kúsi, numbers of non-resident *rayats*, known as *dotwárs*, principally from Bhágalpur District, take *hálhaslí jót*s as yearly tenants. In such cases the holdings, owing to the changes in the course of the river, are not the same from year to year. Rent is paid according to the *berá*, and the tenants acquire no rights in the land. The original cultivator's tenure in Dharmpur was *bhaolí*, that is to say, rent was paid in kind, half the produce generally going to the *zamíndár*. I find from the letters of the Collector to the Board of Revenue, before the period of the Permanent Settlement, that the rent in kind was then being gradually altered into a money rent by the *zamíndárlí amlás* or managers, in collusion with the *rayats*. It was about this time that the *hálhaslí* system came into existence. The whole of the great Dharmpur *parganá* is the property of the Mahárájá of Darbhanga, and is at present under the Court of Wards, by whom it has been proposed to change the system to one of payment according to the quality of the land, on the ground that the *zamíndár* is completely at the mercy of the *rayat*, who may cultivate as much or as little of his *jót* as he likes, and pay accordingly. The system requires the *zamíndár* to keep up a large establishment to measure the land every year, in order to ascertain what crops are grown, and to assess rent accordingly. It is said to give rise to unlimited speculation and dishonesty on the part of the subordinates, and is altogether a most unsatisfactory and difficult system to work.

Some other tenures exist on this estate which resemble the *hálhaslí* form of holding, but still differ essentially from it. The manner of rent collection in Dharmpur most in vogue, next to that just mentioned, is called the *jót-jamá*, under which the rent is collected at *hálhaslí* rates, but the *rayat* selects whatever land he likes for cultivation, the boundaries of his holding not being shown in the *zamíndárlí* papers. This is the system which now prevails in Bhawánpur, the most eastern of the three Subdivisions included in the *parganá*, and in some parts of Gondwára, but not in Bírnapur. The origin of the system is easily explained. The river Kúsi, after covering vast tracts of land with sand, and rendering them uninhabitable and uncultivable, takes some new direction, and in course of years this land again becomes fit for cultivation; the villagers return, and break up patches here and there, and their rent is assessed according to the nature and extent of their cultivation. It is necessary to assess low rates, in order to attract cultivators. In course of time

these disconnected patches become well-defined *jóts*, and are entered in the village books against the names of the cultivators. As the land is reclaimed from jungle, and cultivation advances, the villages adopt the *hálhaslí* system instead of the *jótjamá*. Such has been the case in Gondwárl. As soon as the villages are destroyed by the Kúsi and relapse into jungle, the *hálhaslí* system gives way to the *jótjamá*, as is the case in Bhawánípur, and will probably soon be the case in Birnagar, the most western Subdivision. There are one or two other systems of collections which are rare, and appertain either to single villages or individual cases. One is called *hárbira*, which is really a *jótjamá* held at the same rates for all lands brought under cultivation, irrespective of the kind of crop. A second is known as *mushaksi*, and is equivalent to an ordinary lease of an uncertain quantity of land at a fixed rental, payable whether all or any part of the land is cultivated or not.

(16) *Kuláití* is the name of the lowest class of tenures in Purniah, the holders being the nearest approach to tenants-at-will of which the District affords example. It is divided into two kinds, according to the manner of payment of rent—(a) *Nakdí*, in which the rent is paid in money; and (b) *Bhaolí*, in which it is paid in kind. Again, under *bhaolí kuláití* there are two descriptions—(1) *Adhidí*, in which the tenants give half the actual produce of the lands to the landlord; and (2) *Kutbandí*, where they contract to pay such fixed quantity of the produce as may be previously agreed upon, whatever the actual yield of the lands may be. The number of each of these classes of *rayats* cannot be ascertained from the Road Cess Returns.

(17) *The Goláganj Jamá* arises in the following manner:—*Goldís* or granaries are built on the banks of the Kúsi and the Ganges during the four months from November to April, when trade is most active. Rice and other country produce are stored in them till exported, and the land on which *goldís* are built is let on lease. This may be called an *aratdári* tenure.

(18) *Hát Jamá* is a lease granting the right of collecting ground-rent from shopkeepers and others in a market-place. The term is generally held for five years. The Phulbariá *Hát* near the town of Kásbá, in *parganá* Háveli, in the *zamindárl* of Rái Shampat Sinh, has been let in perpetuity on a species of *palni* tenure.

(19) *Káshchari* is the tenure under which land is let for grazing buffaloes and other cattle from the month of January to June. It

is found in Damdahá, in Dharpur, and in Kánkjol and Katiyár, where there are large pasture grounds.

(20) *Ramná* is a similar holding for grazing cattle from May and June to October. The *zamíndárs* sometimes keep *ramnás* under their direct management, and let them from year to year. In *káshcharí* lands the long grass known as *kásh* is grown, and in *ramnás* the short soft grass known as *dúh*.

There are a number of revenue and rent paying incorporeal rights which may be most fitly described here, although they cannot in some cases be accurately defined as tenures —(1) *Jalkar Jamá*, or fishery, requires no special notice in Purniah, being simply the right to fish. The holder of a *jalkar*, when he is of low caste, is called a *maháldár*. The total number of *jalkars* included in the assessments of the Permanent Settlement was 41, and their gross rental 4,778 *sikká* rupees, or £517, 12s. 4d. The names of the three largest are:—Jalkar Nagar, in *parganá* Dharpur, producing a gross profit of £82, 17s. 6d.; Jalkar Balgar, in Kadabá, producing a profit of £35, 15s. 0d.; and Jalkar Shahnagar and Kamalpur, in Badaur, producing £29, 13s. 8d. In the case of A. J. Forbes, of *parganá* Sultánpur, *versus* Mír Muhammad Husáin and others, it was decided by the Privy Council that *jalkar*, or the right of fishery, may exist in India as an incorporeal hereditament, and as a right to be exercised upon the land of another. (2) *Ghát Jamá* is the right to ply ferry-boats on navigable rivers. Two tenures of this class have been let in *patní*,—one, Ghát Dulálganj, on the Mahánandá, near the large market of that name, and the other, Ghát Maiwál, in *parganá* Haveli, near Ekambá. (3) *Bankar Jamá* is found only in *parganá* Kánkjol, and is a lease of land containing wood for fuel. These leases are all small, such as Bankar Amadábád, paying a rent of £12, 12s. 0d.; Bankar Taraf Naráyanpur, paying a rent of £1, 8s. 0d.; and Chandipur, paying a rent of £1, 4s. 0d. (4) *Phalhar Jamá* is a lease allowing the holder to collect the fruits grown in certain areas of country. Their value is insignificant, as in the instances of the Tarai Bághar, in *parganá* Kánkjol, yielding 10s. rent, and Phalkar Durgapur, in *parganá* Haveli, yielding £1, 3s. 6d. rent. (5) *Jamá Shahid* is a similar lease granting the right to collect honey. There is one lease of this kind in *parganá* Kumánpur, called Phulhárá. (6) *Jamá Singhoti* is a lease entitling the holder to levy a certain tax from the sellers or purchasers of cattle at markets within the area he contracts for. Two such tenures exist—at Ránlganj, in

Háveli, yielding a rent of 14s.; and Gaurí, in Dharmpur, £4, 17s. 6d. (7) *Jamá Chútktí* gives the holder the right to take *toldás* or dues (literally, a handful of the commodity taxed) from the petty dealers at markets who pay no ground rent. There is one at Pulsa, in *parganá* Kumáripur, leased out at 7s. 6d. per annum. (8) *Kayáli Jamá* is a lease given by the proprietor of a market, conferring the right to be the weighman in consideration of a certain annual payment. All sales and purchases of commodities must be made through the weighman so appointed, who usually charges one pice or half a pice in the rupee ($\frac{1}{4}$ to $1\frac{1}{2}$ per cent.) on the value of the article weighed. This lease is found in *parganá*s Katiyár, Kumáripur, Kánkjol, Kadbá, Háveli, Sultánpur, and Srípur. The *kayáls* or weighmen are generally of the Sunri or Telí caste.

RENT-FREE HOLDINGS.—The second class of tenures prevailing in Purniah District are *lákhiráj*, or rent-free holdings. Amongst these must be enumerated six estates, which formerly paid 9s. 6d. in revenue, the Government claim on which has been sold to the proprietors, the price realized being £8, 7s. 5d. These were all revenue-free estates in Dharmpur, assessed about 1840 under the Resumption Law, in consequence of some invalidity in the grants creating them. There are 211 tenures entered in the Collector's register of revenue-free estates-in-chief. They are situated as follows:—In Dharmpur, 63; in Srípur, 62; in Badaur, 21; in Háveli, 17; in Sultánpur, 13; in Fathipur Singhiá, 11; in Surjyapur, 8; in Hatandá, 2; in Tájpur, 2; in Terakhardá, 1; in Pawákhálí, 1; in Asjá, 2; in Gagrá, 1; in Kadbá, 1; in Katiyár, 1; in Kumáripur, 5. The total area of these 211 revenue-free estates is 60,273 *bighás*, or nearly 31,000 acres, equal to 48·44 square miles. The estimated rental is £3830.

The Road Cess returns show that the number of rent-free tenures or *míls*, as they are called in Purniah District, held from tenants-in-chief of the State, are as follow:—In Dharmpur, 6041; in Háveli and Sultánpur, 4,222; in Srípur, 1,036; in Tájpur, 726; in Surjyapur, 663; in Badaur, 579; in Kadbá, 426; in Katiyár, 216; in Kánkjol, 210; in Fathipur Singhiá, 187; in Asjá, 177; in Terakhardá, 159; in Pawákhálí, 123; in Kumáripur, 101; in Maldawár, 97; in Burigangal, 21; in Kholrá, 18; in Sháhpur, 12; in Gagrá, 12; in Garhí, 6. The estimated rental of the 15,032 *míls* is £15,409, 2s. 0d. The area is about 180 square miles. These

returns do not show the nature of these holdings, of which some idea may be formed from the following list, which has been prepared by Bábu Rajanínáth Chattarjí from the registers drawn up under the provisions of Regulation xix. of 1793. It is evident that these grants were made almost entirely from religious or charitable motives, a practice which still continues, though in a very limited degree.

(1) *Bráhmottar*; estates granted rent-free to Bráhmans for their support and that of their descendants, either as a reward for their sanctity and learning, or to enable them to devote themselves to religious duties and education; 4025 in number. (2) *Vishnúprit*; lands granted for the maintenance of temples dedicated to Vishnu; 3195 in number. (3) *Sivottar*; for the maintenance of temples dedicated to Siva; 183 in number. (4) *Debottar* is land granted rent-free, the proceeds of which are appropriated to the worship and support of Hindu idols and temples; 182 in number. (5) *Kálpújá*; lands granted for the worship of Kálí; 48 in number. (6) *Mahát-trán*, or lands granted for the settlement of deserving men other than Bráhmans, or to enable private persons to carry out works of public utility; 47 in number. (7) *Bhátottár* estates, granted for the support of Bháts, who record genealogies; 66 in number. (8) *Thákurbári* estates, granted for the support or erection of Hindu places of worship; 23 in number. (9) *Nazar Baidyanáth Jí*; a gift or grant of land made for the worship of Siva, under the name of Baidyanáth; 5 in number. (10) *Bhawání Pújá*; a grant of land for the maintenance of the goddess Bhawání, another name of Kálí; 1 in number. (11) *Madad-másh* are lands granted rent-free for the support of learned or pious Muhammadans; 1393 in number. (12) *Imámat* or *Imám*; lands given by the *zamíndárs* or *ámils* as a favour; 469 in number. (13) *Imámbará*; lands given for the maintenance of an *imámbará* or place of worship, used particularly at the time of the *Muharram* festival; 55 in number. (14) *Tairi-Khudákháná*; lands given for the site of a Musalmán place of worship; 42 in number. (15) *Nazar Khudá*; land given by Muhammadans in honour of the One God, and to support his worship; 40 in number. (16) *Hibánáma*; lands held under a regular deed of gift; 8 in number. (17) *Fakirána*; lands given for the support of *fakírs* or mendicants; 8 in number. (18) *Indyat*; lands given to favourites or old servants; 4 in number. (19) *Tasadak*; allowance given by the State to a temple or religious establishment; 2 in number. (20) *Názar Imám Husáin*; grant

made to an establishment dedicated to Imám Husáin; 35 in number. (21) *Mudf*; a grant of land exempted from revenue or rent on the authority of the Názim; 3429 in number. (22) *Khairát*; land given rent-free expressly as charity to a deserving object; 1999 in number. (23) *Milk*; a general name for rent-free tenures where their origin is uncertain or undefined; 594 in number. (24) *Lákhiráj*, or more properly *bahálí lákhiráj*, are those tenures which were exempted from payment of revenue or rent under the provisions of Regulation xix. and xxxvii. of 1793; 445 in number. (25) *Súrath Hál* is the land held by a *milkdár* who has lost his title-deed, in virtue of a certificate from the *kázi*, stating that he has been in the enjoyment of the land rent-free; 189 in number. (26) *Kabála* means a deed of sale, and signifies that the rent has been remitted on payment of a lump sum of money, in the same manner as has been done in English times in the case of petty estates; 75 in number. (27) *Bamáma* means also a deed of sale, and would seem to be of the same origin as the above; 1 in number. (28) *Chakband* is a service tenure granted to the minor village official, called a *chakladár*, for determining the limits or boundaries of all village areas; 12 in number. (29) *Jágír*, a grant of land made as a reward for some service, and generally held rent free only for life, but which has become hereditary in many cases; 9 in number. (30) *Sanad* means a deed of gift, the nature of which cannot be made out, but it is probable that it owes its origin to Dehli; 1 in number. (31) *Malikána*, land given to a landholder or *zamindár*, who has for some reason been prevented from settling for his estates, for his maintenance, and in consideration of his proprietary right; 1 in number.

Lákhiráj lands are most numerous in *parganá*s Dharmpur, Sultánpur, Srípuri, and Háveli, which have been the property of Hindu and absentee *zamindárs*. Resumptions of *lákhiráj* lands were made before the Decennial Settlement; they are known as *bázidfti*, and have been annexed to the rent-paying lands of the *zamindár*. It was not, however, till between 1836 and 1846 that Government appointed special officers for the purpose of examining the titles on which these tenures were held, with the result, as stated in a previous page, that 1550 estates, with a revenue of £9956, 15s. 0½d., and covering a total area of 268,425 acres or 419·41 square miles, were added to the revenue-roll. As far as can be gathered from the records, it appears that the *zamindárs* did not make much effort to resume

invalid rent-free holdings. During the two years from 1859 to 1860, 983 resumption cases were instituted in the Collector's Court, of which 735 were brought by the landlord of *parganás* Háveli, Srípur, Katiyár, and Kumáripur; 186 were brought by Mr. Forbes, who purchased Sultánpur from Pratáp Sinh; and 31 were brought by the Darbhanga Ráj. Of the cases instituted, 293 were decreed in favour of the plaintiffs, and the rest were struck off. After 1861, the jurisdiction in resumption matters was transferred to the Civil Courts. The reason that the *zamíndárs* did not more largely avail themselves of the benefit conferred by the resumption laws seems to be, that these rent-free grants were very rarely given in consideration of money, but from pious motives or with some religious or charitable object, which purchasers by private sales or at auction for revenue arrears—Hindus as well as Muhanímadans—generally respected until about forty years ago, when some Bengalis, having become *zamíndárs*, braved the opinion of their countrymen and began to exercise resumption rights. The general belief among the people of the District, however, is that many of these tenures were fraudulently created and are invalid.

RATES OF RENT.—The following information concerning the rates of rent prevalent in each of the *parganás* in Purniah District was specially returned in August 1872 by the Collector. It is founded on detailed inquiries made by the executive officers of the District, under orders of the Government of Bengal dated the 4th June of that year. In reporting on this subject, the Collector notices several points, all of which have been taken into consideration in drawing up the statements, and which render absolutely accurate returns almost an impossibility. In the first place, the size of the *bighá* varies in the District from 1225 square yards, when measured with the three and a half cubit pole, to 8100 square yards, when measured with the nine cubit pole. Between these two extremes, as many as nineteen different-sized *bighás* are known. They vary not only in different *parganás*, but in different parts of the same *parganá*. It is even found that in the same village different kinds of land are measured by poles of different lengths. The most common kinds of *bighá* are those measured with the six cubit and the four and a half cubit pole, covering respectively 3600 and 2025 square yards. In my account of the local measures of the District, I have given all the standards in use in each of the *parganás*. Under the present head I can only give rates for the *bighá* most

in use in each. Besides the system of rents founded on the nature and richness of the soil and its area, there is another much followed in the south-west of the District, called *hálhasli*, under which rent is assessed according to the crop grown on the land. An account of this system has found a more appropriate place under 'Tenures.' The Collector thinks that these two forms of assessment are in reality the same, as it is generally very well known what kind of crop will grow in each field. There is another system in force, however, which is very difficult to reduce to any principle. In many villages a high-caste cultivator pays much less than a low-caste man for the same kind of land. In the northern *parganá*s a further difficulty is added by the *gáchbandi* tenure, under which plots of land, varying from a few acres to ten or twelve villages, are leased for a lump sum, the amount of which is regulated by a variety of considerations, such as the caste and character of the tenant, local advantages of road and river communication, and proximity to markets.

Parganá ASJA: with measuring poles in use of 4, 5, and 6 cubits, or 6, $7\frac{1}{2}$, and 9 feet, and customary *bighás* of 1600, 2500, and 3600 square yards, or '330, '516, and '744 of an acre. *Balud*, or sandy soil, suited for the cultivation of rice and mustard, and yielding four or five *mans* of rice and two *mans* of mustard per *bighá*, pays rent at one rupee the local *bighá*, or 3s. $9\frac{3}{4}$ d. per acre. *Doras*, or earthy soil mixed with sand, producing *khesári*, wheat, linseed, and gram, and yielding a crop of two *mans*, pays rent at the rate of one rupee the local *bighá*, or 3s. $9\frac{3}{4}$ d. an acre.

Parganá BADAUR: with a measuring pole in use of $4\frac{1}{2}$ cubits, or 6 feet 9 inches, and a customary *bighá* of 2025 square yards, or '418 of an acre. *Matiyár*, or first quality land, mostly cultivated in rice, and producing three *mans* per *bighá*, is assessed at one rupee per local *bighá*, or 4s. $10\frac{1}{2}$ d. an acre. Second quality land, yielding one *man* and two *sers* of rice per *bighá*, pays rent at 8 *ánnás* the local *bighá*, or 2s. $5\frac{1}{4}$ d. an acre. Third quality land, growing mustard at one *man* and ten *sers* per *bighá*, is assessed at 6 *ánnás* per local *bighá*, or 1s. $9\frac{3}{4}$ d. per acre. *Balud* or fourth quality land, yielding one *man* of rice or mustard per *bighá*, pays a rent of 4 *ánnás* a *bighá*, or 1s. $2\frac{3}{4}$ d. an acre.

Parganá BURIGANGAL: with a measuring pole of 4 cubits, or 6 feet, and a customary *bighá* of 1600 square yards, or '330 of an acre. The rates are extremely low, varying from 1 *ánná* or $1\frac{1}{4}$ d. per local

bighá, or $4\frac{1}{2}$ d. per acre, to $1\frac{1}{6}$, $1\frac{1}{4}$, $1\frac{1}{2}$, and 2 *ánnás*. Most of the land is waste, or produces grass very sparsely.

Parganá CHAK DILAWARI with a measuring pole in use of $4\frac{1}{2}$ cubits, or 6 feet 9 inches, and a customary *bighá* of 2025 square yards, or $\cdot 418$ of an acre. All soils,—*dhanr*, or medium land, growing mustard—*khál*, very low land, producing pulses—*balsundar*, on which *khesári* is the main crop—and *baluá*, or sandy land, growing wheat and linseed,—and all yielding on an average two *man*s out-turn, are assessed at a rate varying from 3 to 12 *ánnás* a *bighá*, or from 9d. to 3s. $6\frac{3}{4}$ d. an acre.

Parganá DILAWARPUR: with a measuring pole in use of $4\frac{1}{2}$ cubits, or 6 feet 9 inches, and a customary *bighá* of 2025 square yards, or $\cdot 418$ of an acre. *Matyár*, or a loamy soil, growing rice or mustard, and yielding three to four *man*s of rice and ten to fifteen *man*s of mustard per *bighá*, pays rent varying from 2 *ánnás* to 14 *ánnás* the local *bighá*, or from $6\frac{3}{4}$ d. to 4s. $3\frac{3}{4}$ d. an acre.

Parganá DHARPUR with a measuring pole in use of 6 cubits, or 9 feet, and a customary *bighá* of 3600 square yards, or $\cdot 744$ of an acre. The rates of rent in this *parganá* vary to a peculiar extent, and formed the subject of a special report in 1875 by the Deputy-Commissioner of Wards' Estates in the Patná Division, to which, as an appanage of the Darbhanga Ráj, the Dharpur *parganá* is subordinate. This estate is divided into three parts, called *zilas*, namely, Bírúgar to the north-west, Bhawánípur to the south of Bírúgar, and Gondwára to the east. The whole of this tract of country has suffered at various times from the destructive inroads of the Kúsi river. During the present century the river has gradually been working its way to the west, and has destroyed the best lands of Bhawánípur. Some ten or twelve years ago it began to attack Bírúgar, where some of the largest villages have recently been cut away. As an instance of the irresistible violence and destructive power of the stream, it may be mentioned that an indigo factory, built some four years ago at Tripáníyá in Bírúgar, is now covered with sand up to the very tops of the chimneys. Unlike the river Ganges, which spreads over the land a fertilizing deposit of muddy silt, the river Kúsi, sweeping down through the hills from the water-shed of Mount Everest, brings vast volumes of sand, which it heaps over the surface of the country, destroying the productive power of the land, choking the wells, and driving the villagers from their homesteads. It takes half a century before

this sand is fit for even the poorest cultivation. To these circumstances the varying rates of rent and the different systems of collection are primarily attributable, but they are in part also due to the fact that the Darbhanga Rájás never visit this portion of their property, as they consider it unlucky to cross the Kúsi. The collections have been left entirely in the hands of underlings, who have sought their own profit at the expense of their masters. The following are some instances of the great variation in rates even for the same land in the same village. In the village of Kishnapur Behání, near Kárágolá, the rates in the eastern *tolá* or ward Banichak are—for *sáli*, or land yielding two crops annually, 6 *ánnás* per local *bighá*, or 2s. 3d. per acre; for *chaumás* or lands yielding one crop, usually a rich crop, as wheat, barley, oats, etc., 5 *ánnás* per local *bighá*, or 1s. 10½d. per acre; for *janglá*, or lands growing pulses of sorts, 4 *ánnás* per *bighá*, or 1s. 6d. an acre. In the western *tolá* Kahálgáon, of the same village, the rates are—for *sáli*, 8 *ánnás* per local *bighá*, or 3s. an acre; for *chaumás*, 6 *ánnás* per local *bighá*, or 2s. 3d. an acre; *janglá*, 4 *ánnás* per local *bighá*, or 1s. 6d. an acre. These are the rents paid to the landlord-in-chief. In the neighbouring villages, for lands of precisely the same quality and possessing similar advantages, the *istimráridár*, a subordinate tenure-holder, collects from his under-tenants at the rate of one rupee per *bighá* or 6s. an acre all round, which they are said to pay willingly. The Manager is of opinion that, as a rule, the higher the rate the better the cultivation. Another instance is afforded by the rates paid in Bishnuaulá, a village in the northern part of Gondwára. These are—for *sáli* land, 8 *ánnás* a *bighá*, or 3s. an acre; for *heti*, or land yielding one crop of rice, 6 *ánnás* a *bighá*, or 2s. 3d. an acre; for *mochrá* or low rice land, 5 *ánnás* a *bighá*, or 1s. 10½d. an acre; for *ropá*, or land suited for transplanted rice, 4½ *ánnás* a *bighá*, or 1s. 8¼d. an acre; for *ekfasla* land, 4 *ánnás* a *bighá*, or 6d. an acre; for *chaumás* land, 3½ *ánnás* a *bighá*, or 1s. 3¼d. an acre; for *janglá* land, 2 *ánnás* a *bighá*, or 9d. an acre; for indigo land, 4 *ánnás* a *bighá*, or 1s. 6d. an acre; for *bhágat* or garden land, 2 *ánnás* a *bighá*, or 9d. an acre; for *ramná* or grazing land, ½ *ánná* a *bighá*, or 2¼d. an acre; and for *khar*, or land growing thatching grass, 1 *ánná* per *bighá*, or 4½d. an acre. In this village a farm measuring 524 *bighás*, or 174·67 acres, pays only Rs. 61. 15. 6, or £6, 3s. 11¼d., as rent. The rates at the village of Bháteswarpur are—for *katri* lands, growing melons and cucumbers, Rs. 2. 8 per *bighá*, or 15s. an acre; for first quality or

sálli-land, Rs. 1. 2 per *bighá*, or 6s. 9d. an acre; for *matiyár*, or land growing indigo, linseed, etc., R. 1 per *bighá*, or 6s. an acre; for *balsuma* or *chaumás* lands, 13 *ánnás* per *bighá*, or 4s. 10½d. an acre; for *balsuma* during first year's cultivation, 12 *ánnás* per *bighá*, or 4s. 6d. an acre; for *boro dhán* land, R. 1 per *bighá*, or 6s. an acre. In this village no lands are rented at a lower rate than 12 *ánnás* a *bighá*, or 4s. 6d. an acre; and the *dotwárs* or outsiders who do not reside in the village, but come from other places to cultivate, pay at the rate of one rupee per *bighá* all round. In Maihna Chánúpur, a village to the south-east corner of the *parṣanā*, the rates are—*tarkári* or vegetable land, 7 *ánnás* per *bighá*, or 2s. 7½d. an acre; *sálli*, 6 *ánnás* a *bighá*, or 2s. 3d. an acre; *chaumás*, 4 *ánnás* per *bighá*, or 1s. 6d. an acre; *jānglá*, or lands growing pulses of sorts, 3 *ánnás* per *bighá*, or 1s. 1½d. an acre. In Múkám Bhawánpur the rates are—*kákri tárбуza*, or land grown with cucumbers and melons, 15 *ánnás* per *bighá*, or 5s. 7½d. an acre; *tarkári* or vegetable land, 11 *ánnás* per *bighá*, or 4s. 1½d. an acre; *sálli*, or land yielding two crops annually, when above flood level, 8 to 9 *ánnás* per *bighá*, or from 3s. to 3s. 4½d. an acre; *sálli*, when subject to inundation, 6 *ánnás* per *bighá*, or 2s. 3d. an acre; *chaumás*, when above flood level, 5 *ánnás* per *bighá*, or 1s. 10½d. an acre; *chaumás*, when subject to inundation, 4 *ánnás* per *bighá*, or 1s. 6d. an acre; *jānglá*, when above flood level, 4 *ánnás* per *bighá*, or 1s. 6d. an acre; *jānglá*, when subject to inundation, 3 *ánnás* per *bighá*, or 1s. 1½d. an acre. In this, as in many other villages in the *parṣanā*, the rates of *bhitta* or high land are higher than those of *diará* or low land, although cultivated with the same crop. The Deputy-Commissioner seems to think that this great variation in rates is confined to Dharmpur. It may be true that in this *parṣanā* it is greater than in other parts of the District, but it is also the fact that very great variety may be observed in every other *parṣanā* in Purniah.

Parganá FATHIPUR SINGHIA: with a measuring pole in use of 6 cubits, or 9 feet, and a customary *bighá* of 3600 square yards, or 744 of an acre. In this *parṣanā*, rice, gram, wheat, mustard, and sugar-cane are grown, and yield from three to six *mans* per *bighá*. For all kinds a single rate of rent is charged, viz. Rs. 1. 3. 4 per local *bighá*, or 3s. 5d. an acre.

Parganá GARARI: with a measuring pole in use of 5 cubits, or 7½ feet, and a customary *bighá* of 2500 square yards, or 516 of an acre. *Doras*, or first quality land, is assessed at Rs. 2 per *bighá*, or

8s. $1\frac{1}{2}$ d. an acre ; *matiyár*, or second quality land, is assessed at Rs. 1. 4 per *bighá*, or 4s. 9d. an acre ; third quality land, at Rs. 1. 2 a *bighá*, or 4s. 3d. an acre ; *baluá*, or fourth quality land, at 12 *ánnás* per *bighá*, or 2s. $10\frac{1}{2}$ d. an acre ; fifth quality land, at 4 *ánnás* per *bighá*, or $11\frac{1}{4}$ d. an acre. They are all cultivated in rice, mustard, tobacco, and *kúllhí*.

Parganá GARHÍ : with a measuring pole in use of $4\frac{1}{2}$ cubits, or 6 feet 9 inches, and a customary *bighá* of 2025 square yards, or 418 of an acre. The soil is for the most part of a sandy description, and is cultivated in wheat, indigo, and barley, yielding two *mans* per *bighá*, and assessed at 2 *ánnás* 6 *pie* per local *bighá*, or 9d. an acre ; but land growing mustard, pulses, and peas, and yielding one and three-quarter *mans* per *bighá*, pays a rent of 2 *ánnás* per local *bighá*, or $7\frac{1}{2}$ d. an acre.

Parganá GAGRA : with a measuring pole in use of $4\frac{1}{2}$ cubits, or 6 feet 9 inches, and a customary *bighá* of 2025 square yards, or 418 of an acre. *Matiyár*, or a loamy soil growing rice or mustard, and yielding three to four *mans* of rice and ten to fifteen *mans* of mustard per *bighá*, pays rent varying from 2 *ánnás* to 14 *ánnás* the local *bighá*, or from $6\frac{3}{4}$ d. to 4s. $3\frac{3}{4}$ d. an acre.

Parganá HATANDA : with a measuring pole in use of 4 cubits, or 6 feet, and a customary *bighá* of 1600 square yards, or 330 of an acre. First quality land, growing rice, with an out-turn of six *mans* per *bighá*, is assessed at 12 *ánnás* per local *bighá*, or 3s. $6\frac{1}{4}$ d. an acre ; second quality land, growing mustard, with an out-turn of four *mans* per *bighá*, is assessed at 10 *ánnás* per local *bighá*, or 2s. $9\frac{1}{4}$ d. an acre ; third quality land, growing *khesárlí*, with an out-turn of three *mans* a *bighá*, is assessed at 6 *ánnás* per local *bighá*, or 1s. $9\frac{3}{4}$ d. an acre ; fourth quality land, growing wheat and peas, with an out-turn of two *mans* per *bighá*, is assessed at 4 *ánnás* per local *bighá*, or $11\frac{1}{4}$ d. an acre ; and fifth quality land, growing thatching grass, is assessed at 2 *ánnás* per local *bighá*, or $6\frac{3}{4}$ d. an acre.

Parganá HAVFLÍ PURNIAH : with measuring poles in use of $4\frac{1}{2}$, 5, and 6 cubits, or 6 feet 9 inches, $7\frac{1}{2}$ feet, and 9 feet, and customary *bighá* of 2025, 2500, and 3,600 square yards, or 418, 516, and 744 of an acre. *Doras*, or first quality land, growing rice, pays rent from 9 to 11 *ánnás* per *bighá*, or 2s. $9\frac{3}{4}$ d. an acre ; *matiyár*, or second quality land, growing mustard, pays rent from 6 to 8 *ánnás* per *bighá*, or 1s. $5\frac{1}{4}$ d. per acre ; third quality land, growing wheat, pays rent at 5 *ánnás* per *bighá*, or 1s. $1\frac{3}{4}$ d. an acre ; fourth quality land,

growing *kullthi*, pays rent from 3 to 4 *annás* per *bighá*, or from 6d. to 11½d. an acre; fifth quality land, growing thatching grass, pays rent at 1 *anná* per *bighá*, or 2½d. an acre

Parganá KADBA Every standard, from 3½ to 9 cubits, is in force in different parts of this *parganá*, but the 4½ cubit or 6 feet 9 inches pole is the most prevalent, and gives a customary *bighá* of 2025 square yards, or ¼18 of an acre. First quality land, growing rice, with an out-turn of six *mans* per *bighá*, is assessed at one rupee per local *bighá*, or 4s. 10½d. an acre, second quality land, growing mustard, with an out-turn of four *mans* per *bighá*, is assessed at 8 *annás* per local *bighá*, or 2s. 4½d. an acre; third quality land, growing *khesári*, with an out-turn of three *mans* a *bighá*, is assessed at 4 *annás* per local *bighá*, or 1s. 2½d. an acre, fourth quality land, growing wheat and peas, with an out-turn of two *mans* per *bighá*, is assessed at 2 *annás* per local *bighá*, or 6½d. an acre.

Parganá KANKJOI with a measuring pole in use of 4 cubits or 6 feet, and a customary *bighá* of 1600 square yards, or ¼30 of an acre; with a sandy soil (*baluá*), sown in rice, pulses, gram, peas, mustard, barley, *khesári*, and wheat, and yielding—rice, two *mans* three *seers* per *bighá*—mustard, one *man* ten *seers* per *bighá*—gram, peas, and *kaldá*, three *mans* per *bighá*— and paying rent from 4 to 8 *annás* per local *bighá*, or from 11½d. to 1s. 11½d. an acre.

Parganá KASIMPUR: with a measuring pole in use of 4½ cubits, or 6 feet 9 inches, and a customary *bighá* of 2025 square yards, or ¼18 of an acre. *Matyádr*, a loamy soil, growing rice or mustard, and yielding three to four *mans* of rice and ten to fifteen *mans* of mustard per *bighá*, pays rent varying from 2 to 12 *annás* the local *bighá*, or 3s. 7¾d. an acre.

Parganá KATIYAR: Every standard, from 3½ to 7½ cubits, is in force in different parts of this *parganá*, but the 6 cubits or 9-foot pole is the most prevalent, and gives a customary *bighá* of 3600 square yards, or ¼74 of an acre. First quality land, growing rice, and giving an out-turn of six *mans* per *bighá*, pays rent at R. 1 per local *bighá*, or 2s. 8½d. an acre; second quality land, growing mustard, and giving an out-turn of four *mans* per *bighá*, pays rent at 8 *annás* per local *bighá*, or 1s. 4½d. an acre; third quality land, growing *khesári*, and giving an out-turn of three *mans* per *bighá*, pays rent at 3 *annás* per local *bighá*, or 6d. an acre; fourth quality land, growing

wheat, and giving an out-turn of two *mans* per *bighá*, pays rent at 2 *ánns* per local *bighá*, or $4\frac{1}{8}$ d. an acre.

Parganá KHOLRA: with measuring poles in use of $4\frac{1}{2}$ and 5 cubits, or $6\frac{3}{4}$ and $7\frac{1}{2}$ feet, and customary *bighás* of 2025 and 2500 square yards, or '418 and '516 of an acre. *Balsundar*, a soil in which sand prevails, cultivated in *aghamí* rice, mustard, wheat, and tobacco; and *dánga*, or high land, cultivated in hemp, *bhadaí* rice, and sugar-cane, are assessed at from 4 *ánns* to Rs. 1. 8 per local *bighá*, or from 1s. $2\frac{1}{2}$ d. to 6s. $11\frac{1}{4}$ d. an acre.

Parganá KHARBA: with a measuring pole in use of $4\frac{1}{2}$ cubits or 6 feet $4\frac{1}{2}$ inches, and a customary *bighá* of 1806 square yards, or '373 of an acre. The soils in this *parganá* are *matiyár*, or loamy, and *baludá*, or sandy soil. Both are cultivated in rice, and are assessed at from 2 *ánns* to 12 *ánns* per local *bighá*, or from $6\frac{3}{4}$ d. to 3s. 9d. an acre.

Parganá KUMARIPUR: Every standard, from $3\frac{1}{2}$ to $7\frac{1}{2}$ cubits, is in force in different parts in this *parganá*; but the $4\frac{1}{2}$ cubits or 6 feet 9 inches pole is the most prevalent, and gives a customary *bighá* of 2025 square yards, or '418 of an acre. First quality land, growing rice, and yielding five *mans* a *bighá*, pays rent at 8 *ánns* per local *bighá*, or 2s. $4\frac{1}{2}$ d. an acre; second quality land, growing *khesárá*, and yielding three *mans* a *bighá*, pays rent at 4 *ánns* per local *bighá*, or 1s. $2\frac{1}{4}$ d. an acre; third quality land, growing gram, and yielding two *mans* a *bighá*, pays rent at 2 *ánns* per local *bighá*, or $6\frac{3}{4}$ d. an acre.

Tappá LAKHPURA: with a measuring pole in use of $4\frac{1}{2}$ cubits or 6 feet 9 inches, and a customary *bighá* of 2025 square yards, or '418 of an acre. First quality land, cultivated in rice, and yielding four *mans* of rice per *bighá*, is assessed at 4 *ánns* per local *bighá*, or 1s. $2\frac{3}{4}$ d. an acre; second quality land, cultivated in *khesárá*, and yielding three *mans* per *bighá*, is assessed at 3 *ánns* per local *bighá*, or $11\frac{1}{4}$ d. an acre; third quality land, cultivated in peas, and yielding two *mans* per *bighá*, is assessed at 2 *ánns* per local *bighá*, or $7\frac{1}{2}$ d. an acre; fourth quality land, cultivated in mustard, and yielding one *man* twenty *ser*s per *bighá*, is assessed at from 1 *ánna* to 2 *ánns* per local *bighá*, or from $4\frac{1}{2}$ d. to $7\frac{1}{2}$ d. an acre.

Parganá MAHINAGAR: with a measuring pole of $4\frac{1}{2}$ cubits or 6 feet 9 inches, and a customary *bighá* of 2025 square yards, or '418 of an acre. *Doras*, or first quality land, yielding rice, pays a rent of 12 *ánns* per local *bighá*, or 3s. $6\frac{3}{4}$ d. an acre; *matiyár*, or second quality land, yielding mustard, pays a rent of 8 *ánns* per

local *bighá*, or 2s. 4½d. an acre ; third quality land, yielding wheat, pays a rent of 6 *annás* per local *bighá*, or 1s. 9d. an acre ; *balud*, or fourth quality land, yielding *khesári*, pays a rent of 4 *annás* per local *bighá*, or 1s. 2¼d. an acre.

Parganá MALDAWAR : with a measuring pole in use of 4½ cubits or 6 feet 9 inches, and a customary *bighá* of 2025 square yards, or ¼18 of an acre. *Sáli*, or first quality land, growing rice, and yielding five *mans* per local *bighá*; second quality land, growing *khesári*, and yielding two *mans* per *bighá*; and *tarkári*, or third quality land, growing mustard and potatoes, and yielding five *mans* per *bighá*, are all assessed at from R. 1 to 4 *annás* per local *bighá*.

Parganá PAWAKHALI : with a measuring pole in use of 6 cubits or 9 feet, and a customary *bighá* of 3600 square yards, or ¼74 of an acre. First quality land, yielding mustard, sugar-cane, tobacco, and hemp, pays rent at R. 1 per local *bighá*, or 5s. 8¼d. an acre ; second quality land, yielding rice, pays rent at 12 *annás* per local *bighá*, or 2s. 10½d. an acre ; third quality land, yielding *kúltí*, pays rent at 6 *annás* per local *bighá*, or 1s. 9¾d. an acre ; fourth quality land, yielding thatching grass, pays rent at 4 *annás* per local *bighá*, or 11¼d. an acre.

Parganá SRIPUR : with measuring poles in use of 5 and 6 cubits, or 7½ feet and 9 feet, and customary *bighás* of 2500 and 3600 square yards, or ¼516 and ¼744 of an acre. In this *parganá*, rice, gram, wheat, mustard, and sugar-cane are grown, and yield from three to six *mans* per *bighá*. For all a single rate of rent is charged, viz. Rs. 1. 3. 4 per local *bighá*, or 3s. 5d. an acre.

Parganá SURJYAPUR : with a measuring pole in use of 5 cubits or 6 feet 9 inches, and a customary *bighá* of 2500 square yards, or ¼516 of an acre. *Doras*, or first quality land, cultivated in mustard, sugar-cane, tobacco, and hemp, and yielding, per *bighá*—mustard, one *man*; tobacco, two *mans*; and hemp, two *mans*—pays rent varying from Rs. 1. 8 to Rs. 2 per local *bighá*, or 3s. 8¼d. to 7s. 10½d. an acre ; *matiyár*, or second quality land, cultivated in rice, and yielding four *mans* per *bighá*, pays rent from R. 1 to Rs. 1. 8 per local *bighá*, or from 3s. 9¾d. to 5s. 8¼d. an acre ; *balsundar*, or third quality land, cultivated in *kúltí*, and yielding two *mans* per *bighá*, pays rent varying from 4 to 8 *annás* per *bighá*, or from 11¼d. to 1s. 11¼d. an acre ; *balud*, or fourth quality land, grown only in grass for thatching purposes or grazing.

Parganá SULTANPUR : with a measuring pole in use of 6 cubits

or 9 feet, and a customary *bighá* of 3600 square yards, or '744 of an acre. *Sálí*, or first quality land, producing, per *bighá*—four to seven *mans*, rice; one to two *mans*, castor; two to four *mans*, jute; one to two *mans*, indigo; two to three *mans*, wheat; and a half to one and a half *mans*, *múg*—pays rent varying from 4 *ánnds* $1\frac{1}{2}$ *pie* to 8 *ánnds* per local *bighá*, or from 1s. $1\frac{1}{2}$ d. to 2s. od. an acre; *bhauí*, or second quality land, producing, per *bighá*—*khesárí*, one to three *mans*; mustard, a half to one and a half *man*; linseed, a quarter to three-quarter *man*; *arhar*, a quarter to three-quarter *man*; *musúrí*, a quarter to three-quarter *man*; and gram, one to three *mans*—pays rent from $1\frac{1}{2}$ *ánnds* to 4 *ánnds* and $10\frac{1}{2}$ *pie* per local *bighá*, or from 3d. to 9d. an acre; *janglá*, or third quality land, producing *kúlthí*, *bhitmas*, and *kaldí*, of each two *mans* per *bighá*, pays rent at 4 *ánnds* 9 *pie* per local *bighá*, or 1s. $1\frac{1}{2}$ d. an acre.

Parganá *TAJPUR*: every standard from $4\frac{1}{2}$ to $7\frac{1}{2}$ cubits is in use in different parts of this *parganá*; but the 4 and 5 cubits, or 6 feet and 6 feet 9 inches, are most prevalent, and give a customary *bighá* of 1600 and 2500 square yards, or '330 and '516 of an acre; land cultivated in rice yielding four to five *mans*, and in mustard, wheat, and linseed producing two *mans* on an average, pays rent at R. 1 per local *bighá*, or 3s. $11\frac{1}{4}$ d. per acre.

Parganá *TERAKHARDA*: with a measuring pole in use of 6 cubits or 9 feet, and a customary *bighá* of 3600 square yards, or '744 of an acre. *Doras*, or first quality land, producing vegetables and bamboos, pays a rent of Rs. 2. 8. 0 per local *bighá*, or 6s. $9\frac{1}{4}$ d. an acre; *matiyár*, or second quality land, producing *bhadaí* and *aghamí* rice, hemp, and mustard, pays a rent of Rs. 1. 4 per local *bighá*, or 3s. 5d. an acre; third quality land, producing *bhadaí* crops, pays rent at 12 *ánnds* per local *bighá*, or 2s. $0\frac{1}{2}$ d. an acre; fourth quality land, producing *arhar*, *kúlthí*, and *kaldí*, pays rent at 9 *ánnds* per local *bighá*, or 1s. 6d. an acre; *baluá*, or fifth quality land, producing *kúlthí* and grass for thatching purposes and cattle, pays rent at 6 *ánnds* per local *bighá*, or 1s. od. an acre.

OPERATION OF THE RENT LAW.—The number of rent cases instituted under the provisions of Act x. of 1859, the Rent Law of Bengal, is returned by the Collector as follows:—In 1861-62, 5516 original suits were instituted, besides 2022 miscellaneous applications; in 1862-63 there were 5258 original suits, besides 1728 miscellaneous applications; in 1866-67, after the famine, there were 4983 original suits and 5386 miscellaneous applications; and

in 1868-69 the number of original suits was 4029, and that of miscellaneous applications 4632.

FLOODS.—Purniah District is very liable to floods, principally caused by the overflow of the rivers Ganges and Kúsi, in consequence of their being swollen by excessive rain before entering the District. Serious floods occurred in 1869 and 1870, causing extensive damage to cattle and crops; and few years pass in which the same calamity does not occur to a greater or less extent. There are no embankments anywhere. A project for embanking the Kúsi, which would effect the reclamation of a vast area of jungle country, has been proposed, but it is very doubtful whether it could be accomplished. The Collector says: 'In flood years it is common for the high lands to yield well, and a good *rabí* crop often makes up for the loss of rice destroyed by inundation. This is the case particularly throughout the Manihárl, Gondwára, and Damdahá police circles.' The prices of rice, etc. at the time of the floods were:—In 1871—unhusked rice, 1 *man* 15 *ser*s for the rupee, or 2s. 10½d. per cwt.; cleaned rice, 25 *ser*s for the rupee, or 4s. 5½d. per cwt.; Indian corn, 20 *ser*s for the rupee, or 5s. 7½d. per cwt. In 1870 the prices were the same as in 1871. In 1866-67 the maximum prices of paddy and rice were—cleaned rice, best sort, 8 *ser*s for the rupee, or 14s. per cwt.; common rice, 9 *ser*s for the rupee, or 12s. 5½d. per cwt.; unhusked rice or paddy, 25 *ser*s for the rupee, or 4s. 5½d. per cwt.; common unhusked rice, 27 *ser*s for the rupee, or 4s. 1¾d. per cwt.

BLIGHT, *rangí*, occurs in the cases of tobacco, jute, rice, and wheat. Its presence is recognised by the burnt-up aspect of the plants, and the best remedy against it is believed to be an abundant supply of water for irrigation. Some blights are due to insects. That which attacks jute is called *bhud*; it eats up the leaves, and thereby kills the plant. The only precaution the cultivators take is one dictated by superstition. A black earthen pot, which has already been used in cooking, is marked on the bottom with the sign of a cross in lime, and placed in the middle of the field. It is called *tatká*, and it is believed that after it is set up the worms leave the field. This, however, is found to be not always the case. There is another kind of *tatká*, consisting of a scaled paper in which an order to the worms to leave the field is written. The seal is made with a pice or a rupee, and the paper is hung in one of the corners of the field. The native who described these processes to me assured me that 'the

effects of both these *tatkás* are the same.' The worm that attacks tobacco is called *dariyá*. Those which affect rice and wheat are known as *daliyá* and *patká*; they are got rid of in a manner similar to the above.

FAMINES.—The District of Purniah was described in April 1770 as one of 'the four Districts that have more particularly suffered from the unfavourableness of the season.' The great famine of that year seems to have been attended with a frightful mortality in this District. In a secret Report to the Directors of the East India Company, it is stated that 'the famine which has ensued, the mortality, the beggary, exceed all description. Above one-third of the inhabitants have perished in the once plentiful province of Purniah.' The proceedings of the Provincial Council of Murshidábád show that Mr. Ducarrel, Supervisor of Purniah, reported in regard to four *pargands*, after personal visitation, that there having been little or no harvest, the people either perished or went elsewhere for subsistence, and the lands lie waste for want of inhabitants, particularly in Háveli Purniah, which contained more than 1000 villages.' Farther on he adds: 'The *ganj*, called Alamganj, the principal receipts of which depended on the consumption of grain in the town, has declined greatly, by reason of the considerable decrease of inhabitants during the last famine, a great part of the town having become a jungle, and literally a refuge for wild beasts. In respect to the improvement of the country, I must, in answer, premise that, according to the attested accounts I have received from the *pargands*, there have perished near two *lakhs* (i.e. 200,000) of people in this District.' He also reported 'that the miseries in the town of Purniah were not less shocking than those of the rural parts. Pestilence had to be guarded against by the removal of the dead bodies. Upwards of 1000 were buried in three days after my arrival.' He estimated that one-half the cultivators and payers of revenue would perish with hunger, whilst those able to purchase a subsistence would have to pay at least 500 per cent. advance in the price of food. 'On the high and sandy soils, more than half the *rayats* are dead.' The immediate cause of distress is known to have been the failure of nearly all the crops of the year, but particularly the late rice, in consequence of long-continued drought. The areas of the greatest suffering are unknown; indeed, very little more than the foregoing information is now obtainable. In 1788 I find it reported of the Dharmpur *pargand*, that of this great estate, paying a yearly revenue

of £29,000, lands of the annual rental of £7156, or about one-fourth of the whole, had been depopulated during the famine; and most of them continued out of cultivation down to that year.

In 1788 the rainfall was very deficient, the Collector reporting that none fell after the 12th September. He did not consider, however, that this was a sufficient cause to induce a famine. The causes of the prevailing high prices were, according to that officer, that the people refused to part with the *aghami* rice till a good *rabi* or spring crop was ensured by rain during the early months of 1789. 'The produce of the *bhadai* harvest,' he writes, 'was sufficient at the rate it was sold to enable the *rayats* to discharge so much of their rents as to obviate the necessity of their carrying that of Agra-hayan (Nov.-Dec.) to market. Large quantities of grain are in the hands of merchants of Murshidabad; and as the demand for it from the lower parts of Bengal has been suspended for some time, it remains in the *godas* (stores), ready to be exported if a favourable market be found.' 'Even should no enhancement of price take place,' he adds, 'the present average rate of about one *man* for the rupee, with the charges for collecting it and transportation, must render it too dear to be carried to a distant market, except in case of extreme necessity.'

In reporting on a similar insufficiency of rainfall in 1791, the Collector gives some interesting particulars concerning the food supply and capabilities of the District to withstand drought. His report also shows that the prevailing crops in the different parts of the District were much the same as at the present time. 'The rains not leaving off till the end of Sráhan (15th August), the *bhadai* or first crop of rice has not been at all affected by the drought. This harvest is in common years estimated at a third in value, and more than that proportion in quantity, of the whole produce of the year; but it has this season fallen short of that proportion, from the circumstance of the rains setting in more than a month earlier than usual, in consequence of which much of the land which had been prepared was so suddenly inundated that it could not be sown. This was particularly the case in a considerable tract of *parganá* Dharmpur. By the continued drought from the commencement of Bhádra (15th August), the *aghami* rice has been very materially injured. Indeed, it has totally failed, except in spots near rivers and lakes, where some moisture has been preserved. Such situations, however, are not unfrequent; and their crops are so flourishing

that the failure of the *agharí* will not much exceed a half of the usual produce of that harvest, and from the high price which grain bears, the loss in value will be much less. The labour which has been employed in cultivating land for the *rabí* has been thrown away, for the ground is so parched that without a seasonable shower it must be unproductive. There seems at present a great probability that this harvest will totally fail. But as the cultivation of *rabí* is nowhere considerable, except in *zild* Gondwára, the District in general will not be materially affected by this circumstance. Upon the whole, the grain failure need not be estimated at more than a fourth of the usual annual produce, and as the common exportation exceeds that proportion, these Districts would not be considerably injured by the deficiency could they preserve their own produce for their own consumption, which would be the case were the calamity local; but as other provinces in which grain always bears a higher price than in Purniah are likely to suffer by a similar drought, it is probable that the exportation, if not checked, may be much greater than the District is able to afford. It will be easy to ascertain, with sufficient accuracy for the purpose, how much these Districts can spare. I do not apprehend that the revenue will be much affected by the impending scarcity. The eastern *parganá*s, whose level is low, but in which the seasons are earlier than in the *faslí* tracts, have been less injured by the inundation in the month of Jaishtha (May), or by the late drought, and are split into small *zamindáris*, whose proprietors are expert in the management of their estates, and are mostly rich. The losses will be borne without needing or asking indulgence from Government. Dharmpur will, I apprehend, require indulgence from Government. I have already stated that a considerable tract of this *parganá* suffered severely by the early inundation in the month of May; and that Gondwára (near half of the *parganá*) is the only *mahál* in which the *rabí* is considerable, and that this harvest will probably fail. This *mahál* would scarcely have cleared itself in a common season. In its present circumstances some remission seems indispensably necessary.'

From the foregoing extracts, it would seem that in consequence of the lowness of large tracts of the country, the greater portion of the winter rice can survive till reaping time, even if there is no rain from the beginning of September. It may be observed that in the early records we meet more frequently with the expression of fears of an

excessive than of a deficient harvest. Thus, in 1786, it is stated that the revenue of *parganá* Badaur had fallen from Rs. 150,000 a year to Rs. 75,818, 'solely from the too great abundance of rice;' and that in the District generally, much land had fallen out of cultivation in consequence of the excessive production of previous years, and the immense stores of rice in the country rendering grain crops so valueless as not to suffice to pay the rents of the lands producing them.

The completion of the Permanent Settlement drew official attention away from the close observation of the harvests, on which revenue assessments had previously largely depended. There is no mention of any failure greater than ordinary short crops till 1865. The scarcity of the following year, however, is explained by Mr. Cockerell, in his Report on the Distress in the Behar Districts, to have been due to a sudden and excessive increase in the price of all articles of food. There was a certain deficiency in the local produce, but nothing amounting to a general failure of the crops. The grain stock of the District had been reduced by the excessive drain upon it for the provision of the troops, which were constantly passing to and fro in consequence of the war with Bhután during the two previous years. General exportation to other Districts had also so far diminished supplies, that in October 1865 the coarsest kind of rice was selling at twelve *seers* for the rupee. As the fresh crop came in, an improvement took place, and distress was not again generally felt till the following April, when rice had again risen to the above rate. About this time, however, mango fruit, of which there was an extraordinarily large supply, became fit for consumption, and large classes of the people were almost entirely supported on this food for several weeks. Notwithstanding the unusual demand, this fruit was so abundant that a hundred continued for a long time to be sold for a single *pice*, or $\frac{1}{3}$ d.

The information derivable from the District Reports regarding this year is very meagre; but it appears that the *bhadái* crop was in most parts of the District an unusually good one. The people were already, in October 1865, living on it. This crop is considered to be very unwholesome when new; and accordingly a severe epidemic of fever broke out, which depopulated whole villages. In the town of Purniah two-thirds of the population were prostrated. The *aghani* crop in the south was a little below the average. In Krishnaganj two-sixteenths of this crop perished by drought. In the extreme

east, beyond the Mahánandá, people were forced to live on *kachú* and other edible roots. In Srípur only one-half of the average produce was obtained. In Dhámpur, the *aghani* crop, though sown very late in the year, produced well, but the *bhadai* was a failure. Here, however, the people had wheat and plenty of pulses to live on. In Rániganj they took to living on *maruá* immediately after the *bhadai* harvest. 'Near Purniah, however,' the Collector wrote, 'the crops that I have inspected of *aghani* rice look very flourishing, and the persons I have consulted tell me there will probably be nearly a full yield.' In October 1865, the number of *sers* of rice obtainable for the rupee at the Headquarters Station were—rice, best sort, 9 *sers* per rupee, as against 22 *sers* in 1864, and 26 *sers* in 1863; rice, second sort, *bhadai*, 16 *sers*, as against 31 in 1864, and 40 in 1863; *dál*, *arhar*, 8 *sers*, as against 13 in 1864, and 16 in 1863; peas, 12 *sers*, as against 26 in 1864, and 40 in 1863; *khesári*, 12 *sers*, as against 12 in 1864, and 35 in 1863; *áta* (flour), 8 *sers*, as against 9 *sers* in 1864. No relief seems to have been required; only £17 was spent on some petty road work in the Headquarters Station. No deaths occurred, and very little severe distress was reported.

THE FAMINE OF 1874.—The District officers from the first seem to have taken a gloomy view of the situation. The different Deputy-Collectors in charge of Subdivisions sent in statements in November, showing that at the most a half-crop of *bhadai* had been gathered, and that a three-eighth crop of *aghani* might be expected, although generally the prospects in the north-west were not so bad as those in the north-east and east. From Aráriyá it was reported that of the *bhadai* in that Subdivision two-thirds had been reaped, but that the *aghani* would only give a one-eighth crop. The officer at Krishnaganj reported that a one-half crop of *bhadai* had been obtained, and that at the most a three-eighths crop of *aghani* was to be expected, in which opinion the Collector thought him too sanguine. The Mahánandá had not overflowed, and both the autumn and winter rice had suffered along its banks. In the south of the District the *bhadai* yielded a half-crop, and a quarter-crop of *aghani* was expected. From the neighbourhood of the Kúsi, importations were already being made towards the north and east of the District, and people from the eastern villages were going westward to buy. Mr. J. L. Shillingford, who lives near Damdahá, calculated that a three-fourths *bhadai* crop had been gathered, and that a five-eighths *aghani* was expected in his neighbourhood.

The following paragraphs are extracted from Sir R. Temple's 'Famine Minute' on Purniah District. The tracts especially affected from failure of inundation and of rain, and which have the worst degree of distress, are—*Tháná* Kásbá Amúr, population 114,147; Balrámpur, 115,961; Kadbá, 134,158; total population, 364,266. The tracts affected above the average by failure of rain, which have the secondary degree of distress, are—*Tháná* Bahádurganj, population 173,511; Krishnaganj, 144,164; Purniah, 148,619; one-third of Aráriyá, 60,947; total, 527,241. The total of the population more or less distressed thus amounts to 891,507 souls. The question then arises as to what proportion of this population may be expected to need assistance from Government in some shape or other, during the period of distress which is about to begin. The Collector (Mr. Kemble) has calculated the number at 130,000, of which 45,000 pertain to parts other than the distressed tracts, leaving 85,000 for these tracts. The latter number, taken on the population of these tracts, amounts to 10 per cent. The Commissioner (Mr. Barlow) makes a similar calculation, whereby the number comes out at 150,000, which amounts to 17 per cent. on the population concerned. 'I should consider it sufficient for safety to assume 30 per cent. for Kásbá Amúr, Balrámpur, and Kadbá, and 15 per cent. for Bahádurganj, Krishnaganj, Purniah, and part of Aráriyá, which gives a total of 188,365 souls; to which must be added 50,000 for the rest of the District, making a total of 238,375, say 240,000. The period of distress will probably commence towards the end of the current month (March), and will last till the middle of August, when the *bhadal* or August rice comes in—say four and a half months on the whole. The Collector's estimated number, 130,000, at $\frac{3}{4}$ *ser* per head per diem, gives for four and a half months the quantity of 328,000 *mans*. The Commissioner's estimated number, 150,000, gives a total quantity of 380,000 *mans*. In order to provide a margin for safety, he has brought up the quantity to 500,000. The number according to my estimate gives a quantity of 607,000 *mans*, to which it may suffice to add a small margin for safety, bringing up the total to 6½ *lakhs* of *mans*.' 'I have examined with the Collector the map of the relief roads. The lines form a tolerably complete network throughout the distressed tracts, and have a total mileage of 505 miles. With all these, it seems to me that some road or other will be within reach of almost every village, say within a distance of two to four miles.

Unfortunately, the soil of this District is not suitable for tanks ; consequently one means of providing relief works is lost. The cattle are here watered from the rivers or rivulets, which are so abundant. 'The improvement of village tracks will, however, afford the minor sort of employment which may be required.' 'I have had the advantage of meeting Colonel Burn and Mr. M'Queen, and learning from them the fortunate condition of the large *paṅḍā* of Dharmpur, belonging to the Darbhanga Rāj, which is situated in part near the Kúśī and in part near the Ganges. I myself passed through the part near the Ganges, and saw that the crops were excellent. Colonel Burn and Mr. M'Queen described the autumn and winter harvests as having been good, and the promise of the spring harvest as being equally good ; but they doubted whether any real assistance could, or would, be afforded by the people there to the distressed portions of the District.'

On the 6th October the last fortnightly narrative was submitted. It gives in an appendix the following details of disbursements, which, although they had not undergone the careful auditing they are still receiving, may be taken as approximately correct :—Construction of roads, £19,938, 6s. 3d. ; transport of grain, £47,616, 18s. 6½d. ; money advances to residents for purchase of grain, £7472, 10s. 0d. ; money advances to *zamīndārs* to assist their tenantry, £3940 ; construction of store-houses, £2609, 10s. 8½d. ; purchase of tools and plant, £535, 2s. 3¾d. ; store-house establishment, £743, 2s. 3½d. ; minor charges, £1593, 16s. 3½d. It must be remembered, in calculating the entire cost of relief in Purniah District, that the above total is exclusive of the cost of the Government grain, and the carriage of it by rail from Calcutta to Sāhibganj. The following particulars are derived from Mr. A. P. MacDonnell's report on the food-grain supply and statistical review of the relief operations in the distressed Districts of Behar and Bengal during the famine of 1873-74 :—Total quantity of grain delivered, exclusive of transfers, 24,802 tons ; distributed in charitable relief, 1897 tons ; sold for cash, 10,762 tons ; advanced on loan, 4583 tons ; paid as wages of labour, 5366 tons ; remainder, 2194 tons ; 45 tons were used as fodder for the Government transport trains ; 2149 tons are to be written off to wastage, at the rate of about 8 per cent. Of cash expenditure, £19,200 was distributed in charitable relief ; £21,758, 8s. 0d. was paid as wages on relief works ; and £11,312, 10s. 0d. was advanced on loan. The fore-

going figures are taken from the statement presented to the House of Commons. The daily average number of persons charitably relieved in the District of Purniah was as follows:—From 25th January to 24th February, 7; 25th February to 24th March, 797; 25th March to 24th April, 3844; 25th April to 24th May, 8233; 25th May to 24th June, 16,538; 25th June to 24th July, 36,180; 25th July to 24th August, 33,331; 25th August to 24th September, 3572. The average daily attendance each month of labourers on relief works was:—356 in December 1873; 945 in January 1874; 3640 in February; 10,231 in March; 20,264 in April; 31,029 in May; 28,763 in June; 21,746 in July; 9626 in August; and 1014 in September.

FAMINE WARNINGS.—On this subject, the Collector, reporting before the experience of 1874, wrote:—‘I do not consider that famine rates were reached in Purniah in 1866-67. A relief committee was formed, but found nothing to do. I think that six *sers* of rice for the rupee, however, is the dearest rate that could be borne, and it is also the case that the high prices of 1866-67 did not last long; the *aghami* crop put matters straight. The peculiarity of Purniah is that the rainfall varies a good deal over the District; hence the local crop varies much, and universal loss is unknown. I should regard loss of crops in more than six *thands*, or a serious rise after the reaping of the *aghami* crop, as likely to cause scarcity amounting to famine. I should say eight *sers* in January was a price indicating danger. The people depend mainly upon the *aghami*, and with it could almost stand entire loss of the *bhadai* crop. The District is sufficiently well off in means of importation, being full of navigable rivers, and having one trunk road and various inter-District roads running through it.’

MEANS OF COMMUNICATION are not so good in Purniah District generally as in neighbouring Districts of Bengal and Behar. The tract of country, however, lying north of the Headquarters Station, is fairly well opened out by roads, many of which were made during the relief operations of 1874; and as this whole system of roads converges on the great Dárjiling and Kárágola road, it is thereby connected with the river Ganges, and beyond the river, by steamer, with the East Indian Railway at Sáhíbganj. The following statement of the roads borne on the books of the Road Cess Committee, together with their length and the expenditure on each of them during the cess year 1874-75, has been specially supplied

to me by the Chairman. The names of the chief markets situated on each road are also given. The first nine on the list are famine roads ; and the greater part of the expenditure shown against them was on account of compensation for lands taken up in 1874 for their construction, and which could not be assessed during the hurried operations of that period. The Road Cess income during 1874-75 was £5936, 13s. od. on account of cess on lands ; and £254, 17s. 1½d. on account of cess on houses, realized at the maximum rate provided for in Act x. of 1871—that is, $\frac{1}{2}$ anna on every rupee, or $\frac{3}{4}$ d. in the shilling, or 7½d. in the pound. The demand for the year was as follows :—Cess on lands, £7087, 10s. od. ; cess on houses, £300 ; fines, £105, 14s. od. ; total, £7493, 4s. od. There was, accordingly, a balance of £1301, 13s. 10½d. ; the largeness of the amount being due to the fact that little severity in realization was used after the late period of distress. The Road Cess Committee have endeavoured as far as possible to make their roads fall in with those of Bhágalpur on the west, and Dinájpur on the east, so as to complete the communication between the Behar Province and Assam. The second road on the list was made entirely with this view, and is a continuation of the north Emigration Road of Bhágalpur. It has not yet been bridged, nor has all the earthwork been completed, but it is hoped that ferries will be established and the route opened as a fair-weather road very shortly. The first, third, and fourth roads open communication between the bank of the Kúsi and the borders of Maldah and Dinájpur, through tracts south of those traversed by the second. Most of the roads to the south of the District—that is, from the eleventh to the twenty-fifth on the list, are repaired under the supervision of indigo planters, and were originally made by them. They are all most useful roads, not only connecting the factories, but passing through large markets and villages, and uniting them with the Headquarters Station and the Ganges and Dárjiling road. This main line of communication in the District, which is metalled, and, except at Dingra *ghát* on the Mahánandá, bridged throughout, runs from Kárágolá on the Ganges to Titálya, 108 miles.

The following is the list :—(1) Road from Keutgrám to Tárápur, 79 miles long ; cost of repair in 1874-75, £27, 13s. 5½d. This road passes from Dharará and Sirsí markets and indigo factories, by the large village of Bokráhá, to Purniah, where it runs for two miles through the Civil Station along the Ganges

and Dárjiling road, from which it diverges at the thirtieth mile. It then runs through Nilganj and Mahendrapur markets to the Kadbá police station, and thence through the markets at Barsol or Sultánpur southwards to Tárápur on the Mahánandá, opposite Ráiganj, at the triple junction of Maldah, Dinájpur, and Purniah Districts.

(2) Road from Náthpur to Atwári near the *tardi*, 91 miles long. This road runs along the whole north of the District from Náthpur, close by Matiyári police station and Sultánpur indigo factory, through *parganás* Terakhardá, Srípur, Pawákháíl, and Surjyapur, to the borders of Dinájpur.

(3) Road from Sáhibganj to Bhoplá-Tájpur, 78 miles long; cost of repair in 1874-75, £10, 11s. 10½d. This road starts from the frontier of Nepál in the north-west corner of the District, and runs past Amoná indigo factory, crosses the north Emigration Road near Matiyári, runs through Basantpur, the present headquarters of the Aráriyá Subdivision, through Dalmalpur market and Amúr-Kásbá police station, across the Ganges and Dárjiling road and the river Mahánandá at Dengrá Ferry, and on through Rániganj police outpost and market, crossing the river Sadána, to the river Nágar on the Dinájpur frontier. It is the main line of communication from the north west of the District to the eastern divisions. The Nepáls of the sub *tardi* use it when going to the Nekmard and other fairs in the Rásháhí Division.

(4) Road from Túlsiá to Bhádeswari *ghát*, 38 miles long; cost of repair in 1874-75, £1, 9s. 1½d. This road leaves road No. 2 at Túlsiá, on the left bank of the Kankáí, and passes through the Bahádurganj police station to Krishnaganj, where it crosses the Ganges and Dárjiling road, and runs on to the borders of Dinájpur, reaching that District at the point where the Nekmard fair is held.

(5) Purniah to Basantpur, 24 miles long. This road runs through the large rice mart of Kásbá, and is the route ordinarily taken by persons travelling between the Headquarters Station and Aráriyá.

(6) Road from Barsol to Rániganj, 19 miles long; cost of repair during 1874-75, £6, 18s. 8d. This road runs north and south from the large market at Barsol through Balrámpur police station, to meet road No. 3 at Rániganj outpost. It passes through very low country, and is impassable in the rainy season.

(7) Road from Basantpur to Rániganj, 5 miles long, passes through Rájákhari market and Gidwas Factory, where it crosses the old Náthpur road.

(8) Road from Túrkelí, the former headquarters of the Aráriyá Subdivision, to Bahádurganj, 19 miles long; now of little importance.

(9) Road from Bahádurganj to

Garwa Factory, 18 miles long ; passes through Rotá market. (10) Road from Purniah to Náthpur, 51 miles long. In former times, when Náthpur was the great centre for grain trade in the sub-*tará* tract, this was an important road. It passes through Srínagar market, crossing the Saurá at Khátaghát. The other markets on it are at Gaumati, Pesháwá, and Sáifganj. (11) Road from Purniah to Damdahá, 20 miles long, cost of repair in 1874-75, £36, 18s. 11¼d. It runs to Damdahá, through Kájhá and Kháyá indigo factories. (12) Road from Pírganj *via* Bhawánpur to Madanchaik, at the point where the Sáhibganj ferry steamer anchors in the cold and dry weather. It is connected with the Ganges and Dárjiling road by three cross roads. It is 34 miles long, and cost to repair in 1874-75, £146, 19s. 1¾d. (13) Road from Purniah to Háyatpur, 46 miles long ; cost of repair in 1874-75, £175, 14s. 11¼d. The markets on this road are Diwánganj, Sáifganj, Mansháí indigo factory, Nawábganj, and Mánihári. Háyatpur is an important market on the boundary of Maldah, where the Kámlá and Kálandrí rivers are connected with the Ganges. (14) Road from Purniah to Saurágadí, 30 miles long ; cost of repair in 1874-75, £121, 5s. 3¼d. This is the main route in the cold weather for minor traffic by bullock-carts and pack animals to Bhágálpur, by the Sauragadí ferry, and across *parganá* Chháí, south of the Gúgrí, to the Ganges at Baráí ferry. (15) Road from Bishnupur to Gondwára, 17 miles long ; cost of repair in 1874-75, £25, 2s. 9¾d. This is a cross road, passing west of the Headquarters Station through the large market and indigo factory of Dúmar. (16) Road from Gondwára to Saurágadí, 15 miles in length ; cost of repair in 1874-75, £30. It connects the Ganges and Dárjiling road with the Bhágálpur route. (17) Road from Gondwára to Sáifganj, 16 miles long ; cost of repair in 1874-75, £63, 18s. 5d. (18) Road from Koárl to Soháriá *via* Borátá, 25 miles long ; cost in 1874-75, £60. This road and the preceding one connect the Ganges and the Dárjiling road, at Gondwára *tháná*, with the small village markets and factories in the neighbourhood. (19) Road from Banbhág to Rániganj, 29 miles long ; cost of repair in 1874-75, £49, 9s. 11d. This road runs almost parallel with the Náthpur road. (20) Road from Puthiyá to Lakshmípur, 8 miles long ; cost of repair in 1874-75, £12. This is a small cross road connecting the interior of *parganá* Dharmpur with the Ganges and Dárjiling road. (21) Road from Sáifganj to Harinkhárl, 16 miles long ; cost of repair in 1874-75, £50, 6s. od., passes Máinanagar

indigo factory. (22) Road from Lakshmipur to Kodarkátá, a market on the Ganges which has considerable trade with Colgong in Bhágalpur, 8 miles long; cost of repair in 1874-75, £12. (23) Road from Diwánganj to Hardá *via* Pirganj, 7 miles long, cost of repair in 1874-75, £10, 10s. od. This is a cross road connecting the Manihárl road with the Ganges and Dárljling road, at the Hardá bridge. (24) Road from Sáifganj to Mahandrapur, 15 miles long, cost of repair in 1874-75, £32, 18s. 8½d. It runs from Sáifganj through Husáinganj, where the Kadbá *múnsifí* is situated. (25) Road from Chaklá to Koárl, 10 miles long, cost of repair in 1874-75, £25. It runs from a point on the Purniah and Saurágadí road, 7 miles from the latter town, to the banks of the Kúsi near Bhawánpur Rájdham. (26) Road from Krishnaganj to Titályá, 40 miles long. This is part of the old Dárljling road running through the police station and large mart of Kálhaganj. (27) Road from Híwárl to Kálhaganj, 9 miles long; cost of repair in 1874-75, £28, connects Kálhaganj with the present Ganges and Dárljling road. (28) Road from Atwárl to Titályá, 11 miles long; is part of the Dinajpur and Dárljling road. (29) A short road 10 miles in length, connecting the two large villages of Bahádurganj and Pawákhálí, cost of repair in 1874-75, £11, 1s. od. (30) Road from Pawákhálí to Kútí, on the left bank of the Mahánandá, 12 miles long, passing the large mart of Gangi; cost of repair in 1874-75, £80. (31) Road from Belgáchhí *via* Kanháriyá to Kadbá, 12 miles long, connects the roads of the south-east of the District with the Ganges and Dárljling road some miles below Dengra ferry. (32) Road from Rániganj *tháná* to Khageli *ghát*, *via* Mansúlapáti and Puráni, 12 miles long, connects Rániganj with the rice-marts on the Kúsi. (33) A village road from Mangra *ghát* on the Panár to Ukuá, 6 miles long, cost of repair in 1874-75, £7, 7s. 9½d. (34) Road from Jalálgarh to Aráriyá, 14 miles long, cost in 1874-75, £29, 9s. 5d.; an important village road. (35) Road from Aráriyá to Kúrsakátá, 15 miles long; cost of repair in 1874-75, £60, 0s. 2d. (36) Road from Aráriyá to Siktí, 16 miles long, cost of repair in 1874-75, £59, 18s. 6d., this road and the preceding one connect the headquarters of the Aráriyá Subdivision with the police outposts on the Nepál frontier. (37) Road from Aráriyá to Matiyárl, 18 miles long; cost in 1874-75, £9, 13s. 4½d. This road runs along the boundary between *parganás* Sultánpur and Háveli Purniah. Total length of roads in the District, 893 miles, maintained in

1874-75 at a cost of £1184, 7s. 7d. There are besides several small village roads maintained in the Headquarters Subdivision, at a cost of £151, os. 10d.; in Krishnaganj Subdivision, at a cost of £285, 9s. 10½d.; and in the Aráriyá Subdivision, at a cost of £272, 16s. 10¼d.

THE MANUFACTURES of Purniah are comparatively few, and affect the wealth of the District in a very limited degree. Besides the manufacture of indigo, which is most largely carried on in the south, and of gunny-bags in the jute country towards the north, only a few handicrafts are practised. Though most of these give employment to but few families, they are of much interest, and deserve a short description. During the course of the last half-century, however, many have died out, such as, *e.g.*, tent-making, an art which flourished in the town of Purniah under its old Musalmán *faujddrs*. Tooth-powder is also no longer prepared by a separate class of *misiválds*, the women of every family making as much as is required for their own use, from the materials which have been described in the paragraphs on jungle products. All working in glass has also disappeared; the rude glass or *kánch*, still prepared in Bhágalpur, being no longer used for bracelets. The best kind of *sindúr* or red lead, with which all orthodox Hindus mark (*tiká*) themselves on certain religious occasions, is now all imported by European merchants, the natives say from China. The coarse kind used for painting, and with which the upper parts of *kulsis* or earthen vessels are often coloured, is still manufactured in the west and south of the District, where some of the ingredients are readily obtained from the soil. It is prepared by fusing together four parts of lead with sixteen of impure sulphate of soda, and one of an earthy nitrate of potash. Makers of ornaments of lac are still numerous, and the trade is followed by both Hindus and Muham-madans, but their number is decreasing in consequence of the increasing demand for bead and glass bracelets from England. The following is an estimate of the cost of making eight pairs of lac bracelets:—2 lbs of *chauri* or shell lac, costing 6¾d.; 2 lbs. of fine earth, which costs nothing; *chapra*, a gum obtained from different species of acacias, to bind these together, 6d.; firing, 1¾d. The colouring is effected by the addition of 2 oz. of indigo, if blue is the colour required, ¾d.; or 2 oz. *safedá*, a white powder, an impure carbonate of lead, for white, ¾d.; or *sindúr* (red lead) for red, ¾d.; or *hartál* (orpiment), a sulphuret of arsenic, for yellow, ¾d.; or

rānga-pāni, a decoction from the seeds of the *latkan* (*Bixa orrelana*), for pink, $\frac{3}{4}$ d. The cost of production varies, therefore, from 1s. 2 $\frac{3}{4}$ d. to 1s. 3d. A pair of bracelets sell for from 3 to 5 *dunds*, or from 4 $\frac{1}{2}$ d. to 7 $\frac{1}{2}$ d., or eight pair for from 3s. to 5s. The profit of the maker is, then, from 1s. 9d. to 3s. 9d. It takes about four days to prepare eight pairs of bracelets, so that the daily wages of the *chūrīgār* varies from 5d. to 10d. This rarely represents his own individual earnings, as he is usually assisted by his wife and children.

BIDRI WARE.—Of the arts of Purniah District, the preparation and inlaying of *bidri* ware is by far the most interesting, both on account of the excellence of the articles produced, the dexterity of the artisans, and the division of labour used in the different operations of manufacture, a circumstance very rare in India. *Bidri* is a compound metal, and is prepared by members of the Kansári caste, who live in Bellori, a village situated about four miles from the Civil Station of Purniah. There are at present only four families in Bellori who follow this art, and four others of the same caste who make *serposhs* or covers for the native tobacco pipe or hookah. In the manufacture of the ware, the workmen are usually divided into three classes. The first melt and cast the metal, and turn it in a lathe to complete the shape, which is usually that of the ordinary *surahá* or water-vessel, or of a hookah stand. The second trace the figures and other designs on the work, which is then passed on to the third class, who, after doing the carving work, return it to the second, who inlay it with silver, give it a final polish, and stain the metal black. At Bellori, only the first of these operations, namely, that of melting, casting, and turning the metal, is performed. The two other operations are effected in the old town of Purniah. The main component of *bidri* is the metal called by the natives of the District *jastá*, which is identical with the *dastá* of Bengal, or zinc, the other ingredient employed being copper. Lead is not used now, as it seems to have been in the time of Buchanan Hamilton. The whole process may be thus described:—The workmen put a quantity of zinc into one earthen crucible, the copper being placed in a second but smaller one, the proportion observed being 176 parts of the former to 9 of the latter. Both crucibles are coated outside and inside with cow-dung. A fire of cakes of dry cow-dung is made in a small pit, into which the crucibles are put, and covered with fresh fuel. When the metals are fused, the contents of the smaller crucible are poured into the larger. In this operation, as lately observed, no

measures were taken to prevent calcination. Buchanan Hamilton remarked that such a result was obviated by throwing into the crucible a mixture of resin and bees-wax. The fire is again piled round the larger crucible, and in a few minutes the two metals unite, and are passed into a mould formed of baked clay. When the *bidri* has cooled, it is turned by the same workman, with the aid of a hired coolie who works the lathe. The vessel then goes to the second set of workmen, who inlay flowers or other ornament, usually of silver. These artisans first rub the *bidri* with diluted sulphate of copper, which gives its surface a black colour—a process which is intended to assist the designer in tracing the figures, which are thus more distinctly seen by the carver. The designing is effected by a sharp-pointed instrument of steel. When the design is traced, the vessel is passed on to a third workman, who carves or cuts out the design with small chisels of various shapes, and returns the work to the designer, who now with hammer and punch fills the cavities with small plates of silver, which become firmly fixed into the metal. A final polish is given to the whole by rubbing it first with cakes made of shellac and powdered corundum, and then with a piece of charcoal. When the polish has been completed, a permanent black colour is given to the *bidri* by the application of a paste formed of four parts of sal ammoniac, one of unrefined nitre, and five of rough saltpetre, freshly collected, the whole being moistened with rape-seed oil, to which a little powdered charcoal has been added. This paste is thickly applied to the ware, which is allowed to remain covered with it for four days. It is then washed, and is found to be of a fine black hue, which is not affected by water, and is not liable to rust. It does not dint under the blows of a hammer, but breaks into pieces when too violently struck, although it is very far from brittle. It is not nearly so fusible as tin or zinc, but melts more readily than copper. *Jastá* or zinc sells in Purniah at the rate of $2\frac{3}{4}$ *seers* per rupee, or 2 lbs. 12 oz. for a shilling. The proportion of copper to be mixed with this is about $2\frac{1}{4}$ *chhatáks*, which cost 4 *ánnds*, or 6d. The melters and turners sell the ware produced from this amount of metal, usually two articles, at 2 rupees, or 4 shillings, so that the profit they make is about 9 *ánnds*, or 1s. $1\frac{1}{2}$ d. The inlayers and polishers receive high pay. *Bidri*-ware is of two kinds: the best is called *garkhi*, in which the workmanship is very good; the second kind is called *karná bidri*, the designs on which are of a much plainer description, and the finish inferior. A *garkhi bidri*

vessel of the ordinary size sell at from 14s. to £1. Although the preparation of the metal is confined to the Kansárl caste, the inlaying and polishing is carried on by members of many other castes, such as Sonárs, Dhánuks, Sunris, and Musalmáns.

CLEANING OF COTTON is effected by Musalmáns called Dhuniyás. They buy cotton-wool at 2 *ser*s of 85 *told* weight for the rupee, and remove the foreign matter always mixed with it by means of an instrument called a *dhandít*. In cleaning, one *chhaták* or 2 oz. is lost; and the remainder, 1 *ser* 15 *chhatáks*, is exchanged with women who spin thread, for 1 *ser* 4½ *chhatáks* of thread that is, at the rate of 1½ *ser*s of cotton for 1 *ser* of thread. The price of 1 *ser* 4½ *chhatáks* of thread is Rs. 1. 4. 6 or 2s. 6¾d., at the rate of 1 *ser* per rupee. Therefore on every rupee or two shillings' worth of cotton, the Dhuniyá makes a profit of 4 *ánnds* 6 *pie* (6¾d.). A man can clean 3 *ser*s of cotton daily, and a woman can spin cotton into thread at the rate of a *chhaták* a day. One *ser* 15 *chhatáks* of cotton will yield 1 *ser* 14 *chhatáks* of thread. Hence the woman's profit is 1 *ser* 14 *chhatáks*, minus 1 *ser* 4½ *chhatáks*, or 9½ *chhatáks* of thread, the price of which is 9 *ánnds* 6 *pie* (rs. 2¾d.). A woman takes a month to spin 1 *ser* 15 *chhatáks* of cotton into thread, so that she earns only 9 *ánnds* 6 *pie* a month; of course she does this in addition to her own household duties. Women of all castes spin thread.

BLANKET-WEAVING is carried on by Garerís almost entirely in the west and south of the District. Some of the members of this caste, which is exclusively employed in the rearing of the wool-yielding sheep and in this manufacture, have no flocks, and live entirely by weaving; others have both looms and flocks, and others have flocks and no looms. All, however, hold farms, as, owing to the frequency of disease, the produce of their flocks, and consequently of their looms, is uncertain. The wool of the two first shearings from each lamb is separated into white and black, and is woven into fine blankets. That of the first shearing, and some of the finest of the second, is woven without dyeing; but most of the second shearing, which is of an indifferent black, is dyed of this colour. All the wool of the subsequent shearing is mixed, and is spun and woven without distinction, so that, if properly mixed, the colour should be grey. This, however, is rarely done; and in the same blanket some threads are black, some grey, and some white, all irregularly disposed. The women tease and spin the wool on a small wheel, and the men weave it in the same primitive loom that is used for making

sackcloth or gunny. The cloth is, therefore, woven in very narrow slips, called *patís*, from five to seven of which are usually stitched together to form a blanket. There are four kinds of blankets: the largest is 7 *háths* or 10 feet 6 inches long, by 4 *háths* or 6 feet wide, and requires 5 *ser*s or 10 lbs. of wool, costing about 5s. It takes a man and woman fifteen days to make one, and the price is 8s., giving a profit of 3s. The second kind is 6 *háths* or 9 feet, by 3½ *háths* or 5 feet 3 inches, and requires 4 *ser*s or 8 lbs. of wool, costing 4s. One is made in about twelve days, and is sold for 6s. The third kind is 5 *háths* or 7 feet 6 inches, by 3 *háths* or 4 feet 6 inches, and requires 3 *ser*s or 6 lbs. of wool. It takes eight days to make one, which is sold for 5s. The fourth kind, 4 *háths* or 6 feet, by 2½ *háths* or 3 feet 9 inches, requires 1½ or 1¾ *ser*s or 3 lbs. to 3½ lbs. of wool, costing from 1s. 6d. to 1s. 9d. It takes five or six days to make, and is worth 3s. There are also inferior blankets, called *chháptí*, which sell at 2s. each, and are very coarse, being often made with an admixture of the wool of the Bengal sheep.

GUNNY is largely manufactured in the Krishnaganj Subdivision by the women of the Koch, Bhim, and Páliyá castes, who bring the woven pieces to market, where they are purchased by small traders, *bipáris*, who carry them for sale to the Kúti, Rupádahá, and Dulál-ganj *bázárs*, on the banks of the Mahánandá, whence they are exported to Calcutta by boat. Owing to the recent introduction of machinery for the manufacture of gunny, the demand for hand-made cloth has been declining. The Subdivisional officer estimates the export of gunny pieces from Krishnaganj at about 5,000,000 pieces. The gunny is manufactured into strips of about 5 feet in length and 3½ or 4 feet in width. The price of the raw jute which is required to make one such strip is about 4 *pie* or 1½d. A woman cleans the raw jute and finishes one strip in a day, for which she gets from 7 to 9 *pie*, 2½d. to 3¾d.; so that her labour is only worth about 1 *ánná* or 1½d. a day. The gunny manufactured is of very coarse texture.

PAPER.—In the town of Krishnaganj there are about thirty families of country paper manufacturers, who call themselves *kághaziyds*. They are Musalmáns by religion, and intermarry only among themselves. They subsist wholly on the profits of their special trade. The paper is manufactured from jute fibre, which is pounded into pulp and then mixed with half its weight of lime. This mixture is allowed to soak in water for three days, after which the lime is washed away

and the pulp is put into a vat with clean water, and frequently stirred up so as to prevent its settling to the bottom. A flat square sieve is then introduced, and a portion of the fine jute pulp is caught in it, which, when dried, forms a sheet of paper. Rice-starch is applied to the surface to give it a smooth appearance, and it is thus rendered fit for use; $1\frac{1}{4}$ *seers* or $2\frac{1}{2}$ lbs. of jute is sufficient for the manufacture of four quires of foolscap size. A quire sells for four *pie* ($1\frac{1}{2}$ d.), and a family makes as many as twelve quires of paper in a day, when the pulp is ready for use. As, however, the whole process takes between four and five days, the out-turn must be divided by one of these numbers to give the daily average earnings. Some of the *kāghaziyās* own several vats, and these, of course, contain paper in all stages of preparation; but the greater number are content with one vat, which gives them just sufficient to live upon. The jute used for paper manufacture are the *munidsā* and *koshtā*, and not the ordinary *jāthī* or *desī* sorts.

SPIRIT DISTILLATION.—Country spirit is distilled in the Government distillery from rice, from the petals of the *mahud* flower, and from *kotra*, or the refuse of date sugar. The drink made from the first is called *pachwādi*. In its preparation the rice is first moistened in water and then put in an earthen jar, the bottom of which is perforated with holes. Another larger earthen pot is then filled with water and placed on a fire. On it the jar containing the rice is fixed, and the rice is boiled by the steam from the pot of boiling water below. The rice is then taken out from the pot, put on the ground, covered with a black piece of cotton cloth or blanket, and left for four or five hours. It is then mixed in a basket with *bākhār*, or small balls formed of the roots of the following plants:—*Bankūl* (*Zizyphus vulgaris*); *desī-bair* (*Zizyphus jujuba*); *karabī* (*Nerium odorum*); *kath-bel* (*Feronia elephantum*); mango (*Mangifera Indica*); *akhund* (*Calotropis gigantea*); *bromdundī*, whose scientific name I cannot determine; *jaintī* or mace (*Æschynomene sesban*); *deodhān* (*Holcus saccharatus*); *amla* (*Phyllanthus emblica*); *dhutūra* (*Datura metel*); *kūchla* (*Strychnos nux-vomica*); *stj* (*Euphorbia nereifolia*); *simul* (*Bombax Malabaricum*); and *arjan* (*Terminalia arjuna*). The mixture is in the proportion of 30 lbs. of rice to five *bākhār* balls, of the size of an ordinary musket bullet. It is not often prepared in this District, but is mostly brought in from Nepāl. The rice is again divided out in small parcels, over each of which a heavy weight is placed, till in the course of a week

it becomes quite hard, and is called a *karchá*. When required for use, the *karchás* are mixed with *churd*, a preparation of rice described on page 286, in the proportion of 30 lbs. of the former to 20 lbs. of the latter, and steeped in a large jar of water for seven or eight days. During this time complete fermentation takes place, and the country spirit is distilled from the liquid in a rude still. The quantity of *karchá* and *churd* mentioned produces about three gallons of spirit, valued at Rs. 7. 8. 0, or 15s.

THE MANUFACTURE OF INDIGO is of very old date in Purniah District. The first mention I find made of it is in a letter, dated the 16th Jan. 1788, from the Collector to the Board of Revenue, in which he mentions a Mr. Coustard, 'a quiet, industrious man, proprietor of a small indigo manufacture,' amongst some non-official Europeans resident in the District. Indigo was, however, probably largely cultivated before that time, as in the following year the Collector made a detailed report on the manner of its cultivation. Níl-ganj, a few miles south of the native town of Purniah, was the first factory built, probably about 1775. The vats were then made of wood, and the boilers of copper. The new industry seems to have attracted much attention amongst the people, and pieces of the plant were circulated amongst the village head-men as curiosities. The Kolási factory in *parganá* Katiyár was erected a few years afterwards. Thus the cultivation seems at first to have progressed southwards towards the Ganges *didras*. The Náthpur *parganá*, now in Bhágalpur, was the next field for indigo operations. Mr. Smith, whose name is still preserved in one of the Purniah *bázárs*, took the whole *parganá* on lease from Government and erected factories. The Collector's Report of 1789 shows that the cultivation was carried on by a system of advances; on receiving which, at rates varying from 1s. to 6s. 3d. per *bighá* of 2400 square *háths* or cubits, according to the soil, the cultivator handed the land ploughed and weeded to the planter, who merely sowed the seed. When it is remembered that at this period rice was often so cheap and abundant that it did not pay the cost of harvesting it, it is easy to understand that indigo cultivation spread rapidly. Where the planters were also landlords, they did not in any case exact a higher rate of rent than 12 *ánnds* or 1s. 6d. a *bighá*, a rate which the Collector seems to have thought moderate. The manner of valuing the crop was also likely to satisfy the *rayat*. When the crop was full grown, three or four of the leading villagers, together with an *ámín* or surveyor from

the factory, estimated the produce as it stood in the field. If they failed to agree, it was cut and bound into bundles, and as many of these bundles as could be loaded on three carts drawn by four bullocks was considered to be equal to 'the produce of a *bigha*,' and valued at 8 rupees or 16s., provided, however, that the plant was of a luxuriant growth, and not deficient in leaf. After the seed was sown, no further care seems to have been taken of the plant, except for a little weeding. If a second cutting was obtained, the planter received it without paying anything to the cultivator.

In Dr. Buchanan Hamilton's time, the relations were not so favourable to the cultivator; but it is probable that, as indigo land was unsuitable for other summer crops, the dye was sufficiently remunerative to induce a considerable production. Its great advantage was that then, as now, such land annually bore a second crop of rape or mustard seed, except in a few high places, where some indigo plant was preserved and allowed to mature seed. Dr. Buchanan Hamilton's description principally refers to the south of the District about Manihárl, where the seed was usually sown in February, and, when the season was favourable, reaped before the inundation in July. If this occurred late in the season, and there were many showers in spring, there were sometimes two cuttings from the same field; but on an average of years the quantity procured from the second cutting was very inconsiderable. When the inundations came early, the crop was often entirely lost, and generally suffered more or less. In moderate seasons this loss fell more heavily on the manufacturer than on the farmers, for the latter, knowing that the plant expands under water, allowed it to soak two or three days, within which time it does not rot, but subsequently produces a trifling quantity of indigo. Another description of land was very low, and the only crop that could be sown on this, instead of indigo, was summer rice or millet; on such land indigo was less dependent on the early showers of spring, without which the plant on other soils must fail. October indigo was also grown on two kinds of soil. 'The first is on the banks of the great rivers, where there are spaces covered with sand, that produce a very scanty vegetation in spring, and are never regularly rented, but in a few parts are sometimes cultivated with water-melons and other cucurbitaceous plants. If the sand does not exceed one foot in thickness, and rests on a tolerable soil, this kind of land has been found highly favourable for indigo, and it is almost the only crop which the

farmers would with satisfaction cultivate. The seed is sown in October as the floods retire, and with little or no previous culture, and the plant afterwards requires little care or expense. The moisture then in the sand enables the seed to germinate, and sends a tap root down towards the richer soil. Until the root reaches this, the plant resembles a fibre ; but no sooner does it reach the soil, which is preserved moist by the sand, than it acquires vigour, and the driest seasons and most scorching winds produce little or no effect on its subsequent growth ; for no soil seems to prevent evaporation so powerfully as sand.' 'The other land fitted for sowing indigo in October is that which produces a winter crop, either as the only harvest of the year, or as succeeding rice or other grain that is reaped in summer. This indigo is usually sown along with rape-seed, which is gathered in January, and leaves the indigo to ripen in spring. Sometimes the indigo is sown along with wheat or barley ; but as these are sown in November, and ripen later than the rape-seed, they are less fit for the purpose. One great advantage has been found to attend the October cultivation of indigo, as fitting it for the lower parts of the District. In favourable seasons it comes early to maturity, and towards the bottom of the stems ripens its seed before the season for cutting the plant arrives. When this happens, the seed may be picked from the growing plant, without material injury.' In one year between 300 and 400 *mans* of seed were procured from one small factory, and the *rayats* were paid for it at the rate of Rs. 5 or 10s. a *man*.

Dr. Buchanan Hamilton gives some very interesting estimates, mostly on the authority of a leading planter of those days, named Mr. Ellerton. Each *bighd* of 76 cubits square yielded on an average 12 bundles, measured with a chain of $3\frac{1}{2}$ cubits in length. One factory *man* of indigo was ordinarily produced from 350 bundles. In comparing the profits of the cultivator from indigo and from rice, Dr. Buchanan Hamilton estimated the out-turn of the latter at $5\frac{1}{2}$ *mans* to the *bighd*, valued at Rs. 2 (4s.), or double the value of indigo. Mr. Ellerton, however, calculated 7 *mans* as the ordinary average, worth Rs. 2. 12. 0 (5s. 6d.), or nearly three times the value of the indigo. Dr. Buchanan Hamilton continues : 'It is true that the whole expense of the cultivation of summer rice, in ploughing, weeding, watching, and reaping, may be double that of indigo ; for in the three first operations very little pains is bestowed on this plant, and unless it is near the factory, the manufacturer pays the expense of carriage,

while, as I have said, the charge for reaping grain is enormous. The land also on which indigo is raised is in general poor and low-rented, and where it is the only crop, does not pay more than 4 *ánnds* or 6d. a *bighá*, or one-quarter of the produce. Still, however, the rice is no doubt a more profitable crop. In fact, the farmers, except on the poor sandy land that will not produce rice, are exceedingly backward to undertake or continue indigo cultivation; and many of the landlords discourage their tenantry from engaging in it by every means in their power.' In Gondwára *parḡand*, where indigo is still largely produced, Dr. Buchanan Hamilton obtained the following statistics for four factories during eight years:—In 1800, 41,764 bundles of the plant were cut, and 131½ factory *mans* of indigo produced; in 1801, 48,834 bundles of the plant were cut, and 162 factory *mans* of indigo produced; in 1802, 26,083 bundles were cut, and 109½ factory *mans* of indigo produced; in 1803, 74,525 bundles of the plant were cut, and 278 factory *mans* of indigo produced; in 1804, 93,945 bundles were cut, and 381 *mans* produced; in 1805, 138,798 bundles were cut, and 537 *mans* produced; in 1806, 92,770 bundles were cut, and 310 *mans* produced; in 1807, 166,106 bundles were cut, and 754 *mans* produced: total, 682,825 bundles of plant, yielding 2662 factory *mans*, or 95 tons, of indigo. The average result is that 257 bundles of the plant yield one *man* of the dye. In Gondwára the land is higher and the soil stiffer than in Manihárf, and 18 bundles were said to be the yield of the standard *bighá*. Dr. Buchanan Hamilton estimated that there were, in 1810, 64 factories in the whole District, cultivating 70,000 *bighás* of land.

For the description of indigo cultivation and manufacture I have three full reports: the first, by the Collector, whose observations extend over the whole District; the second, by Mr. A. J. Forbes, *zamindár* of the Sultánpur *parḡand*, in the north of the District; and the third, by Mr. G. Shillingford, of Kolási Factory, which is especially full and statistically valuable. In October, what are technically known as the settlements take place. The cultivators attend at the factory office, when they are paid up all that may be due to them for indigo delivered during the preceding season, and take advances for the ensuing crop. The sum advanced and the terms of the contract vary in different parts of the District. The planters in the south give at the present time Rs. 3 or 6s. per local *bighá*, and make the contract only for one year; in the north, Rs. 2 and

often only R. 1 per *bighd* is advanced, and a contract is sometimes made for as long a term as ten years. The contract generally binds the *rayat*—(1) to cultivate in indigo a certain quantity of land, varying usually from about $\frac{1}{4}$ *bighd* to 4 or 5 *bighds*, exclusively for the particular factory making the advance; (2) not to sell the indigo plant produced on this land to any other factory; (3) to get the land ready in proper time for sowing, the number of sowings being sometimes specified; (4) to sow it when ready; (5) to weed it at the proper time, with the aid of the factory servants; (6) to cut the plant when required to do so; (7) to deliver a certain quantity, generally 8, sometimes 7 or 9 bundles, measured with a six-*hāth* or 9-foot chain, per rupee. The planter binds himself—(1) to take any seed the plant may produce before or after cutting, at the rate of Rs. 5 or 10s. per *man*; (2) to make good any loss the *rayat* may suffer from wilful negligence by the factory servants; and in most cases (3) to pay for carriage either by cart or boat to the factory. As soon as the settlements have been completed, or during the settlements, should they be prolonged—that is to say, during November and December, the planter has to measure the field for which his *rayats* have contracted, in order to see that he has the exact quantity and proper description of land. The *kāthd* used in indigo measurements is generally the same as that used in the *parganā* to which the village belongs, whose lands are being measured.

Lands begin to be prepared for indigo about the end of December, and ploughing and harrowing go on, according to the description of land, until the middle of April and even till May. In some places sowing begins in October on the higher kinds of alluvial land, where the seed is often sown broadcast, not immediately after the floods retire, but whilst the fields still retain much moisture. No ploughing is requisite under this system, which is called *khakī*. In most factories, however, no land can be sown till February, when the *mūghd* sowing is made on high land from which the *mūghd tori* or red mustard crop has been reaped, and on other high land which retains its moisture. In the end of February a lower and more moist description of high lands, and in March the higher *didras* or *char* lands subject to inundation, and in April the lower *char* lands, are sown. Sometimes the planter waits for rain before he sows; and sometimes he sows according to the method called *hararā*, in which there are many successive ploughings and harrowings until the soil is thoroughly dry and pulverized, when the seed is scattered broad-

cast and a favourable shower is awaited. If there be a copious fall of rain the plant springs up amazingly fast, and in a month stands a foot high; but if it be a mere drizzle, the rotting of the seed in the ground is to be greatly apprehended. Should there be no rain for twenty days or a month after the seed has been sown, there is no fear of loss if the ground has been well prepared, the seed remaining perfectly intact and unaffected, and showing no sign of sprouting. In some parts of the District very high land is not sown till the end of April (*Baisakh*), nor even till within a few weeks of the setting in of the rains. The more near the period of the monsoon rains it is sown, the better is the crop. These sowings also produce the best colour, because 'the ground on which it thrives, being less moist, less effectively vitiates the fecula in the plant by sucking it down as sap.' In the south of the District, if there is a good fall of rain in April, the *rayats* sow all their fields from which *pūrbī torī* or white mustard has been harvested with *baisakhī* indigo. This crop is raised by the *rayats* in what is termed *fazl* cultivation, as they do not contract for it, but sow it of their own accord, over and above what they settle for by bond. *Baisakh* seems to be the natural season for sowing indigo, as at that time seed which has been lying dormant in the soil since the previous season germinates; and wild indigo, *ban-nīl*, also comes up. Up-country seed is used for the October and February sowings, and *desī*, or seed grown in or near Purniah District, for the later sowings. The higher lands require more cultivation than the lower, twelve ploughings, *bārā chās*, being necessary on such lands; while on the lower lands only six are given, more being considered to injuriously affect the plant. Land from which a *torī* crop has been taken does not receive more than four *chās*. Ploughing costs the planter who uses hired ploughs about one rupee for eight turnings up of the soil. The cultivator could plough twelve times for the same money. Weeding, which commences in April, costs, in the south of the District, about 8 *ānnās* per *bighā*, or 3s. an acre. It is done with the *koddālī* or spade, and consists in removing only the larger weeds or young plants of the *jhau* tree (*Tamarix dioica*). In the north, however, it is a more expensive and troublesome operation, and is effected by the *pusnī* or spud. All weeds and grass are removed. When the earlier sowings are about two feet high, the plant is cut, leaving about half a foot still standing, in the hope of obtaining second and third cuttings from it. The first cuttings are

called *murhan*, and the others *khūtīd*. The plant left is kept for seed. In the south of the District, indigo sometimes stands six and eight feet high when it is cut.

The manufacture begins in June. The plant is brought in small bundles on carts or boats to the factory, and deposited near the vats to be measured. Carts and boats also are obtained on the advance system, the advance being at the rate of Rs. 8 or 16s. per cart, and Rs. 12 or £1, 4s. od. per boat. In some places pack-bullocks or buffaloes are used as means of transport. A chain, usually 6 cubits or 9 feet long in the south, and $4\frac{1}{2}$ cubits or 6 feet 9 inches in the north, is passed round the stems of as many of the bundles or *pūlas* as will fit within it. The number of these is supposed to represent a chainful, and the rest are counted, each chainful being subsequently paid for at the rate fixed in the contract. The *rayat* gets a receipt for this amount as soon as his plant is measured. The plant is now carried to the steeping vats, where it is arranged, bundle over bundle, and stacked. Large beams are put on to press down the plant, and water is pumped in. The plant is then left to steep, and, if February sowing, remains in this state from ten to twelve hours, or, if April, from fifteen to twenty hours, until the experienced eye perceives that the liquid, a highly diluted indogen, has attained a fine bright orange colour. A thick froth rests over the whole, and is of a dark blue or bluish-black colour. From these signs, and from the general appearance of the vat, the planter knows it is time to run the liquid into the adjoining vat, where it is to be oxidized by a process of beating. Over-steeping makes a larger produce but inferior colour, and under-steeping the reverse. Both extremes are to be avoided, as a medium of weight and colour in indigo is the most profitable to the planter. Good indigo is invariably light, and bad indigo heavy. The beaters, usually Dhāngar coolies specially hired, plunge into the fluid, which is about knee deep, and begin to beat it with paddles, called *pharūd*s, at first slowly and gently, and then more quickly and strongly. Eight to fourteen men, according to the size, are required for each vat. The froth after rising to a great thickness gradually subsides, and finally disappears altogether. The beating is generally completed in three to four hours if the plant has been properly steeped, but if under-steeped it takes as much as five or five and a half hours to oxidize the fluid. The beaters now come out of the vat, in which the *fecula* is permitted to settle. If it has been properly beaten, the

fecula will have perfectly subsided in an hour or less. Care must be taken never to overbeat a vat, as the fecula grains then become broken into very fine dust and do not possess sufficient gravity to subside. As soon as the grains begin to unite, which may be tested by taking a little of the fluid on a plate, and when the general aspect of the vat is black, it is time to desist. As soon as the fecula has subsided, the water is drained off by means of holes perforated in the sides of the vat, one above another, and closed by pins. The uppermost pin is opened first, and so on to the lowest. The indigo is now pumped up into the boiler from the 'fecula vat,' where the produce of all the vats has been collected for that purpose. The fecula is generally boiled from eight to ten hours, until the froth entirely disappears from the surface, a little pure water being occasionally added to prevent burning. It must also be kept constantly stirred. After boiling, the indigo is strained, and permitted to flow into a small flat vat, technically known as 'the table.' Here the water is permitted to flow into a small hollow at the side, and from that it is lifted up in buckets, and sometimes pumped up back into the table again. The table is covered with a sheet, over which the liquid is thrown. After this 'changing,' as it is called, has been kept up for an hour and a half, or sometimes two or three hours, the water becomes perfectly clear, and the indigo, in the consistency of thin gruel, is left on the sheet. It remains in this state, wrapped and folded up, with weights upon it to press out any water still remaining. It is then put into strong boxes lined with cloth, the sides of which are perforated with holes. The boxes being filled, they are placed under screw or pulley presses until the indigo coheres in a firm block, not unlike cheese in consistence. This block is taken out, and, by means of a frame of iron wires, cut into cakes. The cakes are next arranged on open shelves in the indigo 'godown' or storehouse, which must have good ventilation that the cakes may dry quickly. As soon as they are dry, they are carefully sorted according to colour, packed in mango-plank chests, containing from four to seven hundred cakes each, and sent to the Calcutta agents of the factory, to be sold there by public auction or to be shipped direct to England.

The only factory for which I have received statistics is the large concern at Kolási. The factory has a cultivation of about 3200 *bighas*, or nearly 1400 acres. During the eleven years preceding 1872, two seasons brought losses, three seasons covered their

expenditure, and six years were good. The average sum expended on the working of this concern during the same period was, in round numbers, £3800, besides about £200 of interest, or £4000 in all. According to Messrs. Thomas and Co.'s Indigo Circular, the average price which the Kolási indigo fetched from 1862 to 1872 was £24 per factory *man*. According to the same authority, the average out-turn was 280 factory *mans*. The average number of bundles cut for the five years preceding 1872 was 102,500. The average area of cultivation was about 3200 *bighás*. The average yield per bundle of plant manufactured was seven-sixteenths of a cake; 366 bundles ought to give one *man* of indigo. The average number of cakes made annually was 44,800, each cake weighing about 4 *chhatáks* or 8 ounces when dry; that is, 160 cakes went to make up one *man*. The average yield per *bighá* was, therefore, $3\frac{1}{2}$ *seers* or 7 lbs. The average number of bundles cut per *bighá* has been 32. The out-turn, however, is sometimes much larger. In the village of Modra, in which $223\frac{1}{4}$ *bighás* of land are sown in indigo, 14,341 bundles were cut in one year, giving 64 as the average number per *bighá*. Similarly in the village of Simáriú, where 186 *bighás* of land are sown in indigo, 7414 bundles were cut, giving, on an average, 40 bundles per *bighá*. In the village of Sáif-ganj, 364 *bighás* of land are sown, and 14,332 bundles cut, giving an average of 40 bundles per *bighá*. In Dalorí, 198 *bighás* of land are sown, and 8735 bundles cut, giving, on an average, 43 bundles per *bighá*. The average profit has been £2720, thus:—Proceeds of the average out-turn of 280 *mans* of indigo, at £24, the average price per *man*, £6720; deducting outlay, or expenses incurred annually, £4000, there remains an average annual profit of £2720. The rate of profit in average years, therefore, is 68 per cent. on the floating capital annually expended, and in really good years it must be more than cent. per cent. The Kolási concern employs about 80 coolies daily for ordinary work, such as digging, weeding, etc.; about 70 ploughmen; about 20 messengers to supervise the cultivation; 16 factory messengers and personal attendants; and 60 others—grooms, elephant-drivers, thatchers, masons, carpenters, blacksmiths, gardeners, and postmen; in all, 296. About 1700 men are engaged in cultivating during the indigo season.

On the subject of indigo-planting in its relation to the cultivators, Mr. Shillingford remarks: 'This [Kolási] factory, and I may say this District, differs from all other Districts, in that the cultivation

of indigo is based more on the principle of free trade than elsewhere. In other words, it pays the *rayat* to cultivate indigo in Purniah, and he does so of his own free-will. For he sells us his indigo at our vats, where it is properly measured and a fair value given for the plant. The proof that it pays is that most of the *rayats* do not live in factory farms, and, consequently, they can, whenever they like, pay up their debt to the factory and stop cultivating.' He thus enumerates the advantages of the Purniah system:—(1) 'During the months that indigo lands are being prepared and sown, no other crop can be grown; (2) three-fourths of the indigo is sown on lands from which one crop has already been reaped; (3) in half of the lands, rice can be sown after the indigo has been cut,—thus the *rayat* gets three crops in one year off half his lands at least, mustard invariably preceding the indigo; (4) on all the *didra* lands only one crop can be grown, and that is indigo, for they go under water in July, remain under water till January, and are not fit for ploughing till March; (5) no grain sells at Rs. 5 or 10s. per *man* in Purniah, of which the *rayat* can reap 10 *mans* or even 6 *mans* per *bighá*, as is the case with indigo seed; (6) the factory assists the *rayats* by giving them bullocks, ploughs, money to pay off their *mahájans* or grain-lenders, and money for weeding. The bullocks they keep for good, and cultivate their other crops with them. The money we advance bears no interest during the season in which the advances are made.' The Collector in 1873 seemed to endorse these statements to a large extent. 'The planters,' he wrote, 'are for the most part gentlemen who have been born and bred in this District, and who are consequently known to, and understood by, the *rayats*. Either the land here does not require, or, at all events, is not considered to require, so much weeding and care as is given to it in other Districts, either in Bengal or Behar. At the time indigo is sown near the Ganges, no other crop will grow. It will also grow on land from which mustard has been reaped.' For these reasons, no difficulty is ever found by the planters in getting *rayats* to take advances. Some gentlemen who possess interest in land, as *patnidárs*, farmers, or as *rayats*, sublet it on condition that the rent is paid in indigo. Mr. C. Shillingford tells me that he lets some of his *jôts* or farms at five bundles of indigo the *bighá*. Petty differences occasionally arise between planters and their *rayats*, such as always will crop up in all business transactions; but I have seen none of that universal disaffection and discontent which prevailed for years in Bengal.'

The following information regarding the area cultivated and the out-turn of the several indigo concerns in Purniah District was obtained for me by the Collector from the managers during the months of March and April 1876, and is founded on the latest measurements and returns. Munshái concern, owned by Mr. C. A. Shillingford, in *parganá* Kumáripur, with factories at Munshái and Kárpur, having an average area of indigo cultivation for the past ten years of 3348 and 2189 *bighás*, and yielding an average out-turn of 189 and 110 *mans* respectively. Máinanagar concern, owned by Mr. G. Burnell, in *parganá* Kánkjol, with factories at Máinanagar, Byná, Kálíganj, and Mahádebpur, having an average area of 6000 *bighás* under cultivation for the past ten years, and yielding an average out-turn of 300 *mans* for the same period. Pírganj concern, in *parganá* Háveli Purniah, owned by Mr. H. Cruise, having an average cultivation of 1000 *bighás*, and an average yield of 100 *mans* of indigo. Sultánpur concern, owned by Mr. A. J. Forbes, with factories at Sultánpur, Amoná, Rohikpur, Jalálgarh, Forbesábád, Rámpur, Máisakul, and Khopdá, having an average cultivated area for the past ten years of 17,568 *bighás*, and an out-turn of 363 *mans*. Bhau-gáon concern, owned by Rái Lakshmi-pat Sinh, in *parganá* Tájpur, having an average cultivation of 2065 *bighás*, and an out-turn of 105 *mans*. Gondwára concern, owned by Mr. H. Cave, with factories at Korá, Nisendra, Dumár, Debpur, Jauría, Bopirá, Khawáspur, Kábar, and Gonrlá, in *parganá* Dharmpur, having on an average 9194 *bighás* under cultivation, and an out-turn of 925 *mans*. Nílganj concern, owned by Mr. R. S. Pyne, in *parganá*s Dharmpur and Háveli Purniah, with factories at Nílganj, Kájá, Khága, Putilwa, Bánbágh, Bishnupur, Mirzápur, Sirsí, and Masauá, having under cultivation an average area of 13,913 *bighás*, and an out-turn of 675 *mans* of indigo. Sahará concern, in *parganá* Dharmpur, owned by Mr. J. L. Shillingford, with factories at Sahará, Hansáílí, and Koáshí, having an average area of 4000 *bighás* under cultivation, and an out-turn of from 350 to 400 *mans*. Kolási concern, in *parganá* Kolási, owned by Mr. G. W. Shillingford, with factories at Katiyár and Sambalpur in *parganá* Dharmpur, having an average area of 5000 *bighás*, and an out-turn of 500 *mans*. Mahendrapur concern, in *parganá* Háveli, owned by Mr. F. Cruise, with factories at Mahendrapur, Mathaur, Sanhesbáliá, and Dinapur, having on an average 3000 *bighás* under cultivation, and an out-turn of 300 *mans*. Dharará concern, in *parganá* Dharmpur, owned by Mr. E. De Souza, having 900 *bighás*, and

60 *mans* out-turn. Kaltái concern, in *parganá* Lakshmipur in Bhágalpur, with factories at Burgáwan and Phusiyan, in Purniah, having 300 *bighds*, and 35 *mans* out-turn. Barrará concern, in *parganá* Dhampur, owned by Mr. M'Allister, but closed since last year (1875); having an area of 4000 *bighds*, and 200 *mans* out-turn, with factories at Barrará, Máikánt, Mahárájganj, Parmarandpur, and Gokúlnagar. Náthpur, a factory in South Dhampur, belonging to the Gangaldahi concern in *parganá* Bhágalpur, having an average area of 100 *bighas* under cultivation; out-turn not given. Bawará concern, in *parganá* Kánkjol, owned by Mr. R. Walker, with factories at Bawará, Dilawarí, Síbganj, and Jotrám Rái, having 6000 *bighds* under cultivation, and an out-turn of 300 *mans*. Gidwas factory, in *parganá* Háveli Purniah, owned by Rái Lakshmipat Sinh; area, 600 *bighds*; out-turn, 50 *mans*. Deoríá concern, in *parganá* Háveli Purniah, owned by Mr. Bentley, with factories at Deoríá; area, 1000 *bighds*; out-turn, 80 *mans*. Lálpur factory, in *parganá* Háveli Purniah, owned by Miss Gouldhauke, area, 900 *bighds*; out-turn, 75 *mans*.

COMMERCE.—The chief articles of trade in Purniah are rice, oil-seeds, indigo, jute, tobacco, hides, and fish. The principal seats of commerce are Kásbá and Ekambá, in *parganá* Háveli Purniah; Dulálganj, in *parganá* Srípur; Krishnaganj, in *parganá* Sultánpur; Rániganj, on the Pitáná, in *parganá* Badaur; Nawábganj, in *parganá* Kánkjol, and the Headquarters town of Purniah. The trade is carried on mainly by permanent markets, but there are also large fairs held at Kárágolá in November and February; at Ekambá in February; and at Nekmard, a little beyond the eastern boundary in Dinájpur, also in February. Scarcely any manufactures are exported except gunny and indigo. Agricultural products, such as paddy, jute, tobacco, oil-seeds, and also dried fish and hides, form the chief staples of the export trade. In return for these, piece-goods, spices, drugs, and brass and iron ware are largely imported. The trade of the entire Bhágalpur Division is chiefly in the hands of Bengálís from the neighbourhood of Calcutta. The number of up-country traders is proportionately very small. The exports and imports generally pass to and from the metropolis and the neighbouring marts. The former greatly outbalance the latter; and this fact alone supports the view generally held, that owing to an influx of money the peasantry are becoming well-to-do and contented.

Statistics of the trade of the District have been collected under the

system of river traffic registration which has been carried on at Sáhíbganj since 1872.

The following figures show the amount of goods in standard *mans* shipped at places above Sáhíbganj, for despatch down the Ganges to places below the registering station, for the six months from January to June 1872 :—From Bhawánípur—rice, 422 *mans*; wheat, 3190; other cereals, 210; pulses and gram, 50; oil-seeds, 59,996; jute, 1840; tobacco, 1076; miscellaneous vegetable produce, 150; hides, 29 *mans*. From Kúsi—wheat, 625 *mans*; oil-seeds, 4611; jute, 1045; miscellaneous vegetable produce, 68; saltpetre, 5860; hides, 107; *ghí*, 200; miscellaneous, 190 *mans*. From Kamálpur—rice, 92 *mans*; wheat, 325; pulses and gram, 120; oil-seeds, 4838; jute, 940; tobacco, 13,702; spices and pepper, 35; miscellaneous vegetable produce, 241; timber, 8; silk goods, 7; cotton goods, 2; gunnys, 400; miscellaneous, 615 *mans*. From Kárágolá—rice, 6872 *mans*; wheat, 2850; pulses and gram, 74; oil-seeds, 7504; jute, 2953; sugar, 59; tobacco, 4657; spices and pepper, 4035; miscellaneous vegetable produce, 460; shellac and other dyes, 118; timber, 10; brass and brass work, 137; other metals, 151; salt, 256; hides, 1280; horns, 133; *ghí*, 6; silk goods, 4; cotton goods, 78; gunnys, 18,137; miscellaneous, 4178 *mans*. From Ráníganj—rice, 207; oil-seeds, 7706; jute, 1756; cotton, 200; tobacco, 750; *ghí*, 495; miscellaneous, 163 *mans*. From the small places in the District—rice, 2659; wheat, 343; other cereals, 125; pulses and gram, 802; oil-seeds, 15,513; jute, 728; sugar, 1920; tobacco, 1191; miscellaneous vegetable produce, 4870; timber, 2; saltpetre, 200; hides, 125; horns, 18; *ghí*, 176; gunnys, 180; miscellaneous, 3170 *mans*. For the same period the traffic passing Sáhíbganj upwards, and alleged to be consigned to places in Purniah District, was :—To Bhawánípur—rice, 3625 *mans*; spices and pepper, 320; miscellaneous vegetable produce, 1; shellac and other dyes, 80; timber, 24; other metals, 169; salt, 6192; cotton goods, 4; miscellaneous, 163 *mans*. To Kárágolá—rice, 120 *mans*; jute, 125; cotton, 25,617; sugar, 91; spices and pepper, 2201; miscellaneous vegetable produce, 768; shellac and other dyes, 275; timber, 130; brass and brass work, 778; other metals, 585; salt, 8675; *ghí*, 16; silk goods, 1; cotton goods, 115; gunnys, 1; miscellaneous, 16,031 *mans*. To small places in the District—rice, 4716 *mans*; wheat, 150; other cereals, 440; pulses and gram, 375; oil-seeds, 16; jute, 1; cotton, 233; sugar,

22; spices and pepper, 25; miscellaneous vegetable produce, 4404; shellac and other dyes, 14; timber, 759; brass and brass work, 258; other metals, 61; salt, 9528; *ghí*, 1; silk goods, 100; cotton goods, 68; gunnys, 48; miscellaneous, 3899 *mans*. The total traffic, therefore, from Purniah down the Ganges for the six months of 1872 was as follows:—Rice, 10,252 *mans*; wheat, 7333; other cereals, 335; pulses and gram, 1046; oil-seeds, 46,168; jute, 9262; cotton, 200; sugar, 1979; tobacco, 21,376; spices and pepper, 4070; miscellaneous vegetable produce, 5789; shellac and other dyes, 118; timber, 20; brass and brass work, 137; other metals, 151; salt, 256; saltpetre, 6060; hides, 1541; horns, 151; *ghí*, 877; silk goods, 11; cotton goods, 80; gunnys, 19,717; miscellaneous, 8316 *mans*. The total of the up-traffic to Purniah in the same period amounted to:—Rice, 8461 *mans*; wheat, 150; other cereals, 440; pulses and gram, 375; oil-seeds, 16; jute, 126; cotton, 25,850; sugar, 113; spices and pepper, 2546; miscellaneous vegetable produce, 5173; shellac and other dyes, 369; timber, 913; brass and brass ware, 1036; other metals, 815; silk, 24,395; *ghí*, 17; silk goods, 101; cotton goods, 187; gunnys, 49; miscellaneous, 20,093 *mans*.

During the second six months of 1872, from July to December, the return showed the following downward trade:—From the town of Purniah—rice, 1001 *mans*; wheat, 1201; pulses and gram, 770; oil-seeds, 3158; jute, 593; tobacco, 8409; miscellaneous vegetable produce, 19; salt, 200; *ghí*, 44; gunnys, 33,883; miscellaneous, 2 *mans*. From Kárágolá—rice, 886; wheat, 9405; other cereals, 540; pulses and gram, 5292; oil-seeds, 26,914; jute, 282; tobacco, 590; spices, pepper, etc., 135; miscellaneous vegetable produce, 770; salt, 100; hides, 2528; *ghí*, 3; silk and silk goods, 8; cotton goods, 2; gunnys, 41,087; horns, 13; miscellaneous, 822 *mans*. From Nawábganj—rice, 4; wheat, 670; pulses and gram, 342; oil-seeds, 15,392; miscellaneous vegetable produce, 81; *ghí*, 172; miscellaneous, 12 *mans*. From Kúsf Sáhíbganj—rice, 1932 *mans*; wheat, 767; other cereals, 15; pulses and gram, 474; oil-seeds, 25,468; jute, 1290; tobacco, 450; miscellaneous vegetable produce, 235; timber, 864; *ghí*, 209; miscellaneous, 2 *mans*. From Ráníganj—wheat, 1000 *mans*; oil-seeds, 14,566; jute, 204; tobacco, 4781; miscellaneous vegetable produce, 300; *ghí*, 490; miscellaneous, 75 *mans*. From Bhawánipur—rice, 257 *mans*; wheat, 10,846; other cereals, 100; pulses and gram, 6978; oil-seeds, 22,157;

tobacco, 109; salt, 12; hides, 132; *ghí*, 17; miscellaneous, 6 *mans*. From small places in the District—rice, 2116 *mans*; wheat, 4960; other cereals, 818; pulses and gram, 3456; oil-seeds, 21,038; jute, 66; sugar, 86; tobacco, 1266; spices, pepper, etc., 225; miscellaneous vegetable produce, 9116; shellac and other dyes, 474; timber, 160; other metals, 50; hides, 80; *ghí*, 126; cotton goods, 10; miscellaneous, 1732 *mans*. The upward trade for the same period was:—To Kárágolá—rice, 1646 *mans*; other cereals, 160; pulses and gram, 15; jute, 31; cotton, 1532; sugar, 18; tobacco, 10; spices and pepper, 125; miscellaneous vegetable produce, 602; shellac and other dyes, 15; timber, 126; other metals, 54; salt, 6786; silk, 68; cotton goods, 18; gunnys, 1178; betel-nut, 35; miscellaneous, 7228 *mans*. To Kúsfí Sáhíbganj—rice, 8; other cereals, 7; pulses and gram, 25; sugar, 16; spices and pepper, 50; miscellaneous vegetable produce, 54; shellac and other dyes, 10; timber, 16; brass and brass work, 20; salt, 8589; cotton goods, 16; gunnys, 233; betel-nut, 1055 *mans*. To small places in the District—rice, 2790 *mans*; wheat, 87; pulses and gram, 285; oil-seeds, 224; jute, 192; cotton, 2; sugar, 148; spices and pepper, 225; miscellaneous vegetable produce, 1656; shellac and other dyes, 54; timber, 4365; brass and brass work, 125; other metals, 393; salt, 22,186; silk, 5; cotton goods, 165; gunnys, 1008; betel-nut, 1404; miscellaneous, 1598 *mans*. The total traffic down the Ganges from Purniah for the second six months of 1872 thus amounted to—rice, 6176 *mans*; wheat, 28,839; other cereals, 1473; pulses and gram, 17,242; oil-seeds, 128,683; jute, 2435; sugar, 86; tobacco, 15,605; spices, pepper, etc., 360; miscellaneous vegetable produce, 10,521; shellac and other dyes, 474; timber, 1024; other metals, 50; salt, 312; hides, 2740; *ghí*, 1061; silk and silk goods, 8; cotton goods, 12; gunnys, 74,970; horns, 13; miscellaneous, 2651 *mans*. The up-traffic to Purniah was—rice, 4444 *mans*; wheat, 87; other cereals, 249; pulses and gram, 325; oil-seeds, 224; jute, 223; cotton, 1534; sugar, 182; tobacco, 10; spices and pepper, 400; miscellaneous vegetable produce, 2312; shellac and other dyes, 79; timber, 5107; brass and brass work, 145; other metals, 447; salt, 37,561; silk, 73; cotton goods, 199; gunnys, 2419; betel-nut, 2494; miscellaneous, 8826 *mans*.

The grand total of traffic down the Ganges for the whole District during the whole year 1872 was—rice, 16,428 *mans*; wheat, 36,172; other cereals, 1808; pulses and gram, 18,288; oil-seeds, 174,851;

jute, 11,697; cotton, 200; sugar, 2065; tobacco, 36,981; spices, pepper, etc., 4430; miscellaneous vegetable produce, 16,310; shellac and other dyes, 592; timber, 1044; brass and brass ware, 137; other metals, 201; salt, 568; hides, 4281; *ghi*, 1938; silk and silk goods, 19; cotton goods, 92; gunnys, 94,687; horns, 164; saltpetre, 6060; miscellaneous, 10,967 *mans*. The grand total of the up-traffic during the whole year was—rice, 12,905 *mans*; wheat, 237; other cereals, 689; pulses and gram, 700; oil seeds, 240; jute, 349; cotton, 27,384; silk, 73; sugar, 295; tobacco, 10; spices and pepper, 2946; miscellaneous vegetable produce, 7485; shellac and other dyes, 448; timber, 6020; brass and brass ware, 1181; other metals, 1262; salt, 61,956; *ghi*, 17; silk goods, 101; cotton goods, 386; gunnys, 2468; betel-nut, 2494; miscellaneous, 28,919 *mans*.

I have not got figures for the several markets for later years, but the gross export trade of Purniah was as follows in 1873 and 1874, as registered at Sáhíbganj:—Oil-seeds, 223,584 *mans* in 1873, 299,390 in 1874; sugar, 1915 in 1873, 4486 in 1874; tobacco, 37,782 in 1873, 32,893 in 1874; wheat, 33,423 in 1873, 27,754 in 1874; pulses and gram, 60,983 in 1873, 11,470 in 1874. In 1873, 66,920 *mans* of salt were despatched upwards past Sáhíbganj to Purniah, and 66,869 *mans* in 1874. All the foregoing figures, however, probably do not represent more than a third of the traffic of the District, even exclusive of its trade with Nepál. The rice trade, for instance, is an up-Ganges one, and does not pass Sáhíbganj. A large part of the jute, oil-seeds, and tobacco find their way to Calcutta by the Mahánandá and Kálindrí, and debouch upon the Ganges at a point below the registering station.

The Commissioner of the Bhágalpur Division, in his Administration Report for the year 1872-73, notices a palpable connection between the export and import trade and the development of the system of paper currency, under which notes are now freely issued and cashed. The amount of notes received for silver in all the treasuries is far larger than the amount of notes issued for silver, and it is impossible to attribute this result to any other cause than the want of equilibrium between the export and import trade. By watching the seasons when the operations connected with the exchange of notes chiefly occur, it has been ascertained that the money received in exchange for notes principally represents the value of country produce purchased and exported to other Districts; while the notes issued

for silver are believed to represent the proceeds of piece-goods and other import trade. In corroboration of the above opinion, it may be mentioned that the heaviest exchanges of silver for notes are carried on in March, April, May, and June, during which months the brokers of the large merchants, called *golddars*, are known to make extensive purchases of grain.

RIVER TRAFFIC STATISTICS.—Since September 1875 a new system of boat registration has been established on all the great water-ways of Bengal, and the results are published monthly in *The Statistical Reporter*. The following tables (pp. 377 and 378), which have been compiled from that source, show (Table I.) the exports from Purniah during the six months ending February 1876, and (Table II.) the imports into the District during the same period.

From these tables it appears that the total of the exports during the half-year, in Class I. (articles registered by weight only), amounted to 516,383 *mans*, or 18,903 tons; of which mustard-seed contributed 35 per cent.; jute, 18 per cent.; wheat, 9 per cent.; linseed, 6 per cent.; and tobacco, 6 per cent. The total of the imports in the same class was 259,321 *mans*, or 9493 tons; of which salt formed 42 per cent.; saltpetre, 8 per cent.; pulses and gram, 5 per cent.; and other saline substances, 4 per cent. The weight of the exports, therefore, exceeded that of the imports by 257,062 *mans*, or just twofold. Under Class II. (articles registered by number only), the most noticeable items are 131,810 gunny-bags, exported in the months of September and December; and 269,500 bundles of hay and straw, exported in October and January. In Class III. (articles registered by value only), the exports were valued at Rs. 46,832 (£4683, 4s. od.); of which European cotton goods formed 38 per cent., all in February; and miscellaneous native goods, 23 per cent. The imports in this class reached Rs. 239,181 (£23,918, 2s. od.), or five times the value of the exports; European cotton goods made up 48 per cent.; native cotton goods, 21 per cent.; and miscellaneous native goods, 19 per cent. of the total.

From the returns obtained at the several registration stations, which are also published in *The Statistical Reporter*, it may be gathered that the trade of Purniah, as might be expected, is mainly confined to Lower Bengal. Out of the total of exports in Class I., only 3 per cent. was sent towards Patná. Of the total imports

[Sentence continued on page 379.]

STATISTICS OF THE RIVER TRAFFIC OF PURNIAH DISTRICT FOR THE SIX MONTHS ENDING FEBRUARY 1876.—TABLE I. (EXPORTS.)

DESCRIPTION OF GOODS.	September	October	November	December	January	February	Total.
CLASS I.	<i>MAHS.</i>	<i>MAHS.</i>	<i>MAHS.</i>	<i>MAHS.</i>	<i>MAHS.</i>	<i>MAHS.</i>	<i>MAHS.</i>
Cotton, twist (European), . . .	...	...	6	...	...	...	6
Lac-dye, . . . . .	...	...	...	...	...	101	101
Red-wood,	300	...	...	...	...	...	300
Red earth, . . . . .	...	...	...	...	...	50	50
White earth, . . . . .	...	...	...	...	...	85	85
Indigo,	83	...	...	459	...	...	488
Indigo-seed,	600	14	...	...	...	450	1,064
Fuel and firewood,	820	...	...	40	...	...	860
Fruits, dried, . . . . .	...	...	...	...	75	3	78
Fruits, fresh, and vegetables, . . .	2	751	150	...	39	...	946
Wheat,	18,478	13,992	8,714	4,594	3,810	535	49,523
Pulses and gram,	5,210	2,893	8,769	615	1,076	1,238	13,810
Rice,	3,863	5,341	1,647	678	145	1,108	12,782
Paddy,	214	1,541	551	...	...	...	2,306
Other cereals,	646	1,080	814	603	429	4	3,576
Jute,	1,786	6,815	11,517	22,198	23,983	30,534	96,833
Fibres, manufactures of,	997	4,773	4,690	2,860	14,630	8,196	37,146
Hides,	25	100	655	3,182	8,915	8,804	9,681
Horns,	1	10	...	196	43	39	289
Iron and its manufactures,	5	...	...	...	...	15	20
Copper and brass, . . . . .	...	...	15	50	28	10	143
Other metals,	5	...	...	10	...	...	15
Lime and limestone, . . . . .	...	...	...	...	10	...	10
Stone,	1,225	...	...	...	...	...	1,225
Stick-lac, . . . . .	...	...	...	33	...	...	33
GAF,	519	363	180	185	189	215	1,651
Oil,	43	8	26	...	...	...	77
Linseed,	11,588	6,302	3,720	4,849	5,982	3,483	35,924
Til-seed,	225	42	...	...	...	16	283
Mustard-seed,	5,080	47,516	41,417	34,093	15,333	12,358	183,710
Castor-oil-seed,	572	74	103	165	...	...	914
Poppy-seed, . . . . .	...	...	...	...	146	...	146
Salt,	510	...	...	...	...	50	560
Other saline substances,	100	...	...	...	...	170	270
Spices and condiments,	705	208	76	8,566	81	4,533	14,170
Sugar, refined,	27	...	...	...	45	18	90
Sugar, unrefined,	25	...	8	300	20	144	497
Tea, . . . . .	...	...	...	...	26	...	26
Tobacco,	13,457	9,697	2,604	4,384	2,877	236	27,258
Miscellaneous,	4,178	478	3,180	1,002	2,856	822	14,256
Total,	100,548	101,958	83,842	91,012	73,828	65,155	516,383
CLASS II	Number	Number	Number	Number	Number	Number	Number
Buffaloes,	22	...	...	...	...	...	22
Birds, . . . . .	...	...	...	...	150	116	266
Timber,	58	...	1,525	316	...	18	1,917
Bamboos,	230	488	...	...	...	...	718
Cocoa-nuts,	3,950	...	4,350	...	...	...	8,300
Canes, . . . . .	...	...	...	...	...	1,200	1,200
Gunny-bags,	53,780	78,030	...	...	...	...	131,810
Hay and straw, . . . . .	...	200,000	...	...	69,500	...	269,500
Miscellaneous,	3,426	...	...	319	950	...	4,695
CLASS III.	Ra.	Ra.	Ra.	Ra.	Ra.	Ra.	Ra.
Woollen manufactures, . . . . .	...	...	880	400	...	...	1,280
Silk manufactures, . . . . .	...	...	...	...	...	4,800	4,800
Cotton (European) manufs.,	100	...	...	...	...	17,500	17,600
Cotton (Native) manufs., . . . . .	...	...	1,100	...	1,330	4,100	6,530
Miscellaneous (Native) goods, . . .	450	413	...	90	8,400	1,369	10,722
Miscellaneous (Europ.) goods, . . .	...	...	...	...	...	3,900	5,900
Total,	530	413	1,980	490	9,730	33,669	46,812

STATISTICS OF THE RIVER TRAFFIC OF PURNIAH DISTRICT FOR THE
SIX MONTHS ENDING FEBRUARY 1876.—TABLE II. (IMPORTS.)

DESCRIPTION OF GOODS.	September.	October.	November.	December.	January.	February.	Total
CLASS I.	<i>mans.</i>	<i>mans.</i>	<i>mans.</i>	<i>mans.</i>	<i>mans.</i>	<i>mans.</i>	<i>mans.</i>
Coal and coke, . . .	...	...	565	840	1,172	1,925	4,502
Cotton, . . .	...	152	75	780	594	1,675	3,276
Cotton, twist (Native), . . .	...	...	...	6	...	8	14
Chemicals and medicines, . . .	21	8	104	68	202	549	952
Intoxicating drugs, . . .	108	...	...	15	...	...	123
Vermilion, . . .	...	...	...	5	400	30	435
Red-wood, . . .	...	...	...	...	23	...	23
Red earth, . . .	...	...	...	...	125	238	363
White earth, . . .	...	...	...	...	...	2,206	2,206
Kiranchi, . . .	...	...	...	...	9	15	24
Indigo, . . .	...	...	...	233	...	3	236
Indigo-seeds, . . .	800	14	...	...	3,781	1,200	5,795
Betel nuts, . . .	1,689	794	227	485	3,745	883	7,823
Fuel and firewood, . . .	885	115	...	...	...	325	1,325
Fruits, dried, . . .	2	...	165	470	94	4	735
Fruits, fresh, and vegetables, . . .	2	...	22	4	358	321	707
Wheat, . . .	253	995	250	640	562	1,296	3,990
Pulses and gram, . . .	3,061	2,994	2,882	1,611	1,318	1,269	13,135
Rice, . . .	647	467	170	...	688	181	2,153
Paddy, . . .	6,128	199	6	75	1,135	67	7,610
Other cereals, . . .	1,065	2,428	811	331	448	1,722	6,805
Gums and resins, . . .	6	...	...	...	320	305	631
Jute and other raw fibres, . . .	31	3	...	...	482	...	516
Fibres, manufactures of, . . .	48	90	18	21	1,984	240	2,401
Silk, raw, . . .	...	6	...	...	8	5	19
Hides, . . .	...	375	...	...	...	...	375
Iron, . . .	989	245	26	114	931	1,922	4,227
Copper and brass, . . .	36	43	5	...	99	223	406
Other metals, . . .	...	21	...	...	...	...	21
Lime and limestone, . . .	1,661	380	825	1,547	1,143	845	6,402
Stone, . . .	...	1,163	200	...	669	1,304	3,336
Shell-lac, . . .	2	...	...	...	...	25	27
Stick-lac, . . .	30	16	20	...	...	80	146
Gai, . . .	2	...	...	1	26	10	39
Oil, . . .	4	2	5	...	50	...	61
Linseed, . . .	...	...	...	30	...	...	30
Til-seed, . . .	...	6	...	...	7	...	13
Castor-oil-seed, . . .	35	95	...	...	...	...	130
Mustard-seed, . . .	509	241	157	390	...	...	1,297
Poppy-seed, . . .	22	31	17	2	133	32	237
Salt, . . .	34,495	...	13,742	12,830	26,524	21,809	109,400
Saltpetre, . . .	...	21,660	20	...	...	...	21,680
Other saline substances, . . .	125	527	529	820	428	9,000	11,429
Spices and condiments, . . .	250	473	83	55	1,269	3,434	5,564
Sugar, refined, . . .	2,551	2,505	351	751	618	567	7,403
Sugar, unrefined, . . .	924	2,082	139	869	819	2,270	7,112
Tobacco, . . .	60	191	227	333	52	390	1,253
Miscellaneous, . . .	9,337	1,180	375	507	1,127	462	12,928
Total,	65,779	39,501	22,016	23,833	51,343	56,849	259,321
CLASS II.	Number	Number	Number	Number	Number	Number	Number
Fowls, . . .	...	...	48	...	...	...	48
Timber, . . .	46	12	...	...	...	...	58
Bamboos, . . .	667	914	599	402	44	100	2,726
Cocoa-nuts, . . .	14,970	7,030	...	...	3,750	...	25,770
Gunny-bags, . . .	4,400	...	...	...	...	...	4,400
Bricks and tiles, . . .	...	...	...	1,000	...	500	1,500
Miscellaneous, . . .	4,853	543	77	310	199	4,478	10,454
CLASS III.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Leather and its manufactures, . . .	...	1,480	9,300	1,037	2,500	2,410	16,667
Woollen manufactures, . . .	...	7,097	...	...	...	...	7,097
Cotton (European) manufs., . . .	595	3,925	1,388	6,284	85,665	16,544	114,411
Cotton (Native) manufactures, . . .	2,240	25,318	16,632	2,200	2,600	3,160	38,150
Miscellaneous (Native) goods, . . .	633	130	78	3,830	22,840	19,925	47,436
Miscellaneous (Europ.) goods, . . .	...	...	33	60	...	850	945
Miscellaneous goods, . . .	...	475	...	...	...	...	475
Total,	3,468	38,375	27,433	13,411	113,605	42,889	239,181

Sentence continued from page 376.]

in the same class, 23 per cent. was received from the direction of Patná, and 2 per cent. was registered at Daraulí on the Ghagrá.

With regard to particular staples of trade, *The Statistical Reporter* furnishes the following details, showing the course of trade and the chief local marts. During the four months November 1875 to February 1876, the total exports of jute were 88,232 *mans*, steadily increasing month by month. Of this total, only 21,944 *mans*, or about one-fourth, went direct by boat to Calcutta, and the remainder was apparently diverted to the railway at Sáhíbganj and other stations. During the two months of January and February, it was ascertained that 4744 *mans* of jute from Purniah thus left the river at Kushtiá. For those same two months the marts that exported jute to Calcutta and Kushtiá may be arranged in the following order:—Dulálganj, 6573 *mans*; Nawábganj, 1286; Barmi, 1177; Krishnaganj, 1070; Ráníganj, 718; Dewang, 343. With the exception of large exports of wheat, diminishing from September month by month, the trade of Purniah in food-grains is insignificant. The export of oil-seeds is large, especially of mustard-seed. The following particulars can be given for the single month of December:—Total linseed exported, 4849 *mans*, from the marts of Nawábganj (1508 *mans*) and Ráníganj (1337); total mustard-seed exported, 34,003 *mans*, from the marts of Bhawánípur (6775 *mans*), Kárágolá (4956), Nawábganj (4931), Damarkúí (4726), Ráníganj (3999), Ekambá (1510), Dulálganj (1380). A considerable proportion of this export of oil-seeds is sent across the Ganges to Sáhíbganj for rail transport. The trade in tobacco may be thus analyzed for the same month of December:—Total exports, 4384 *mans*; of which 1263 *mans* were consigned direct to Calcutta, and 1137 to Húgli; the exporting marts were Kárágolá (1974 *mans*), Dulálganj (1673), Charakpára (535); Purniah town imported 333 *mans*. In the same month, Purniah town exported 3287 *mans* of wheat. The trade in Manchester piece-goods may be thus analyzed for the three months December to February:—Imports, Rs. 108,493; exports, Rs. 17,500. The importing marts were Kárágolá (Rs. 98,759), and Bhawáníganj, Kamalpur, and Nawábganj (Rs. 1600 each). The supply was almost entirely derived from Sáhíbganj in the Santál Parganás. In the month of January, Kárágolá received Rs. 67,300 from that source, and Rs. 10,400 in February; but in the latter month, Kárágolá despatched Rs. 15,200 to Sáhíbganj, and Rs. 800 to Háyatpur

in Maldah, an exceptional re-export, which must be attributed to over trading. In November, the importation of native-made cotton cloth amounted to Rs. 16,632; of which Kántánagar received Rs. 13,800, and Ráníganj Rs. 2500.

THE TRADE WITH NEPAL has always been a matter of most important commercial interest in Purniah. In 1790 the Collector reported that the exports to that country consisted of salt, betelnuts, spices, small cardamoms, pepper, assafoetida, sugar, tobacco, cotton cloths, woollen cloths, muskets, flints, dried fish, earthen pots, and live hogs; and the imports, of timber, ready-made woodwork, rice and paddy, other grains, Bhután blankets, cotton, large cardamoms, oranges, wax, madder, drugs, lac, catechu or Terra Japonica, frankincense, iron, rhinoceros horns and hides, *mainas*, parrots, and falcons. He adds a note on the freedom of the traffic from all duties, a state of things which, from mistaken ideas regarding the balance of trade, he strongly condemns. In the following year the Collector gave a more detailed account of this trade, and estimates its value as follows:—Exports—salt, Rs. 10,000; betelnuts, Rs. 5000; spices, Rs. 3000; small cardamoms, Rs. 1000; pepper, Rs. 2000; assafoetida, Rs. 500; sugar, Rs. 2000; tobacco, Rs. 1000; cotton cloth, Rs. 3000; woollen cloth, Rs. 2000; muskets, Rs. 1000; flints, Rs. 200; dried fish, Rs. 300; earthen pots, Rs. 500; hogs, Rs. 1000: total exports, Rs. 32,500, or £3250. Imports—timber, Rs. 70,000; ready made woodwork, Rs. 10,000; rice and paddy, Rs. 150,000; other grain, Rs. 50,000; Bhután blankets, Rs. 1000; cotton, Rs. 3000; large cardamoms, Rs. 2000; oranges, Rs. 500; wax, Rs. 5000; madder and drugs, Rs. 2000; lac, Rs. 2000; catechu or Terra Japonica, Rs. 4000; frankincense, Rs. 3000; iron, Rs. 1000; rhinoceros horns, Rs. 500, and hides, Rs. 500; *mainas* and parrots, Rs. 1000; and falcons, Rs. 500: total imports, Rs. 304,000, or £30,400.

During the past year, 1875, a system of registration has been introduced for the Nepál trade, which may be hoped to give more accurate results. Up to the present time, however, its operations have been limited; and the following estimates of the yearly imports and exports, made by the officers of the two northern Subdivisions, although founded on the registered returns, are in parts rough estimates of small statistical value.

List of articles imported from Nepál into the Aráriyá Subdivision during the year 1875:—Uncleaned cotton, 3928 *mans*, or 2895

cwts., valued at £1076, 16s. od.; drugs, 123 *mans*, or 87 $\frac{4}{7}$ cwts., valued at £97, 10s. od.; dried fruits, 41 *mans*, or 28 $\frac{1}{2}$ cwts., valued at £131; fresh fruits, valued at £92; wheat, 99 *mans*, or 70 $\frac{3}{4}$ cwts., valued at £12, 4s. od.; other spring crops, 1685 *mans*, or 1203 $\frac{1}{2}$ cwts., valued at £490, 18s. od.; rice, 81,804 *mans*, or 58,431 $\frac{5}{7}$ cwts., valued at £7415, 4s. od.; other *kharif* or rainy-season crops, 52,325 *mans*, or 37,375 cwts., valued at £4203, 10s. od.; gums and resins, 178 *mans*, or 127 $\frac{1}{7}$ cwts., valued at £109, 7s. od.; fibres, raw, 11,472 *mans*, or 8194 $\frac{2}{7}$ cwts., valued at £1848, 14s. od.; fibres, manufactured, quantity unknown, valued at £275, 10s. od.; hides, 2616 pieces, valued at £160, 4s. od.; shellac, 16 *mans*, or 11 $\frac{3}{4}$ cwts., valued at £12, 10s. od.; *ghi*, 47 *mans*, or 33 $\frac{4}{7}$ cwts., valued at £94, 4s. od.; oil, 37 *mans*, or 26 $\frac{2}{7}$ cwts., valued at £29, 16s. od.; oil-seeds, 1163 *mans*, or 830 $\frac{5}{7}$ cwts., valued at £267, 4s. od.; salt, 48 *mans*, or 30 cwts., valued at £8, 8s. od.; spices, 399 *mans*, or 285 cwts., valued at £63, 12s. od.; molasses and sugar, 593 *mans*, or 423 $\frac{4}{7}$ cwts., valued at £634, 6s. od.; tobacco, 175 *mans*, or 125 cwts., valued at £32, 13s. od.; sheep and goats, 2460 heads, valued at £1556, 8s. od.; and timber, 872 logs, valued at £1136, 2s. od.

List of articles exported from the Arányá Subdivision into Nepal during 1875:—Cleaned cotton, 164 *mans*, or 117 $\frac{1}{7}$ cwts., valued at £29, 4s. od.; English cotton-twist, 9 *mans*, or 6 $\frac{2}{7}$ cwts., valued at £29; drugs, quantity unknown, valued at £27, 6s. od.; *gányá*, 42 $\frac{1}{2}$ lbs., valued at £8, 9s. od.; dyes other than indigo, quantity unknown, valued at £13, 6s. od.; dried fruits, 288 *mans*, or 205 $\frac{4}{7}$ cwts., valued at £298; fresh fruits, 627 *mans*, or 447 $\frac{4}{7}$ cwts., valued at £49, 12s. od.; wheat, 392 *mans*, or 280 cwts., valued at £73, 10s. od.; other spring crops, 1193 *mans*, or 852 $\frac{1}{7}$ cwts., valued at £237, 2s. od.; rice, 890 *mans*, or 635 $\frac{5}{7}$ cwts., valued at £91, 14s. od.; other *aghani* crops, 42 *mans*, or 30 cwts., valued at £8, 8s. od.; fibres, raw, 88 *mans*, or 62 $\frac{4}{7}$ cwts., valued at £10; fibres, manufactured, quantity unknown, valued at £10, 5s. od.; horns, 4s.; raw silk, 4 lbs., valued at 9s.; manufactured iron, 852 *mans*, or 608 $\frac{4}{7}$ cwts., valued at £600, 3s. od.; copper and brass, quantity unknown, valued at £54, 12s. od.; shellac, quantity unknown, valued at £15, 18s. od.; oil, 53 *mans*, or 37 $\frac{4}{7}$ cwts., valued at £56, 15s. od.; oil-seeds, 195 *mans*, or 139 $\frac{2}{7}$ cwts., valued at £44, 10s. od.; salt, 969 *mans*, or 692 $\frac{1}{7}$ cwts., valued at £444, 12s. od.; spices, quantity unknown, valued at £4, 10s. od.; unrefined sugar or *gúr*, 800 *mans*, or 531 $\frac{2}{7}$ cwts., valued at £251, 4s. od.; tobacco, 2537

mans, or 1830 cwts., valued at £669, 15s. od.; betel-nut, 4s.; dried fish, 261 *mans*, or 186½ cwts., valued at £65; horses, 88, valued at £89, 12s. od.; sheep, goats, and hogs, 9432, valued at £2564, 16s. od.; bamboos, quantity unknown, valued at £2, 12s. od.; cotton, valued at £16; blankets, £74, 13s. od.; manufactured silk, £392; native cotton cloth, £4676, 18s. od.

The imports into the Krishnaganj Subdivision from Nepál in 1875 were estimated to be:—Cotton, 11,920 *mans* of 80 lbs. each; paddy, 156,580; rice, 83,700; mustard, 8750; *ghi*, 540; ginger, 1600; jute, 17,150; gunny, 34,600; tobacco, 18,315; potatoes and vegetables, 2400; iron, 1040 *mans*; hides, 29,720 in number ploughs, 8500; manufactured woollen goods, valued at £60; and native manufactured cotton, valued at £540.

The exports into Nepál from the Krishnaganj Subdivision during the same year were:—Salt, 47,020 *mans*; sugar, 250; molasses, 1450; dried fish, 1100; *ddl*, 3700; flour, 1300; betel-nuts, 1190; brass ware, 900 *mans*; cotton, European manufacture, valued at £1250; and cotton, native manufacture, valued at £3400.

Transit dues are levied by the Nepál Government on both exports and imports. The frontier is divided into a certain number of portions, known as *sair maháls*, which are farmed out for a term of years to contractors called *chaudharts*. The duty on exports is levied either by weight or *ad valorem*, and payment in kind is seldom received. A cart-load of *dhán*, or unhusked rice, pays a fee of 9 *ánnds*, or 1s. 1½d., before leaving Nepál; a cart-load of raw jute pays 5 *ánnds*, or 7½d., and the same quantity of raw cotton Rs. 1. 4. 0, or 2s. 6d. A coolie-load of *dhán* or of cotton is subjected to a duty of one *ánnd* per load, which generally weighs under 1½ *mans*. Rice or cotton carried on pack-ponies pays a duty of one *ánnd* in the rupee, or 6½ per cent. In the case of *ghi*, mustard, tobacco, and ginger, a duty of 1½ *ánnds* is levied per rupee (9½ per cent.). Gunny and cloths pay half a *pice*, or ½d., on each piece. These are the rates fixed by the Nepál Government, but they are frequently exceeded, as the farmer is practically under no control. At some places, the subdivisional officer of Krishnaganj found that the rate on mustard, jute, *ghi*, tobacco, rice, and paddy was the same, namely, six *pice*, or 2½d., on every two shillings' worth purchased. In other parts, rice and paddy paid at the rate of one *ánnd* on the rupee. The duty on exports from Nepál is paid at the time of purchase in the local market, and

the purchaser is there furnished with a pass or *char chitta*. The goods are only examined on the frontier, to see if the description on the pass corresponds with the article exported. Smuggling, if detected, is punished by the levy of double duty. As regards imports into Nepal, the duty is levied when the goods are sold at the markets. But when the importer has a shop in Nepal, he has to pay only a certain sum annually, and is permitted to import as much as he pleases, free of duty, provided he sells in the shop for which he is assessed. Duty on imports is generally levied in kind at so many *seers* in the *man*. If the articles do not admit of payment in kind, and the importer has not a recognised shop, they are subjected to an *ad valorem* duty before he is permitted to retail, the rate being left entirely to the discretion of the *chaudhari*, whose object is to levy the highest amount he can without making it prohibitive of further trading. For instance, in the case of a load of brass ware passing into the Murang, the vendor of which has no shop and intends to retail from village to village, he would pay a certain sum assessed on the value of his stock, and would then be furnished with a pass authorizing him to sell his goods without any further payment of duty.

The chief local markets on the British side of the frontier are :—In the Aráryá Subdivision—Nawábganj, Sonapur, Mírganj, Kasambá, Rájalá, Karsa-kátá, Meghá, Pírganj, Kasét. And in the Krishnaganj Subdivision—Phabwári, Báiríá, Korabári, Digalbank, Gandarbadánga, Tátpod, Kalúghát, and Bhátgáon. The chief trade routes between Purniah and Nepal are, within the Aráryá Subdivision, (1) the Nawábganj, (2) the Pathardebá, (3) the Mírganj, (4) the Maháserí, (5) the Kasambhá, (6) the Sauragadam. (7) the Rájalá, (8) the Kuárl, and (9) the Siktí roads. In the Krishnaganj Subdivision the routes are—(1) from Dhubelí *via* Kocháhá to Chailghází market in Murang ; (2) from Phulwárl *via* Teragách to Chailghází, and again (3) from Fathipur to Chailghází ; (4) from Khániábád to Athmauzá in Nepal ; (5) from Bairíá to Ultabári in Nepal ; (6) from Korábárl, *via* Pulsá, to Mohabárl and Baniáni. in Murang ; (7) from Digalbank *via* Taúgan-dubá to Jhilmilyá market in Nepal ; (8) from Gandarbadánga *via* Khúdábhitá to Pautapará in Murang ; (9) from Simalbárl *via* Ambárl to Khatámaní ; (10) from Tatpoá market to Lodhabárl in Murang ; (11) from Bhawániganj *via* Chaughátí to Khániábhitá ; (12) from Kálughát to Patharmárl ; (13) from Bhargáon *via* Dhob-

gáchi to Dholabárf and Dohnagari in Murang. These are all mere cart roads, which are not in good repair, but are passable for traffic at all seasons.

The trade in cardamoms, bees-wax, *chireta*, timber, ivory, and musk, forms a monopoly of the Nepál Government. The last is considered especially valuable.

The returns published quarterly in *The Statistical Reporter* enable me to give the figures for the trade of Purniah with Nepál for the six months ending March 1876. In Purniah there are three frontier stations to register the passing traffic—at Amoná, Siktí, and Digalbank. During the three months January to March 1876, when the trade was much more brisk than in the closing quarter of 1875, 22 per cent. of the exports from the District, and 60 per cent. of the imports into the District, as well as 61 per cent. of the imports into Bhágálpur, were registered at Amoná; 11 per cent. of the exports and 23 per cent. of the imports at Siktí; and 67 per cent. of the exports and 17 per cent. of the imports at Digalbank. The traffic under Class III. was more equally divided between the three routes.

The total of the exports during the half-year from Purniah into Nepál in Class I. amounted to 15,701 *mans*, or 574 tons,—a total which is exceeded by the exports from the Districts of Muzaffarpur, Bhágálpur, and Champáran. About four-fifths of the whole were despatched in the first quarter of 1876. The chief items are :—Salt, 29 per cent. ; sugar (unrefined), 16 per cent. ; iron and its manufactures, 13 per cent. ; tobacco, 7 per cent. ; rice, 6 per cent. ; spices and condiments, 5 per cent. ; pulses and gram, 4 per cent. The exports in Class II. include 647 cows and bullocks ; 146 buffaloes ; 1087 goats and sheep ; 1488 pigs ; 284 gunny-bags. It appears that Nepál receives the greater portion of her imported domestic animals and all her gunny-bags from Purniah. The total of the exports in Class III. is Rs. 56,867, of which, again, about eight-ninths were despatched in the first quarter of 1876. The chief items are :—Native-made cotton goods, 45 per cent. ; English piece-goods, 34 per cent. ; miscellaneous native goods, 15 per cent. ; woollen manufactures, 6 per cent.

The total of the imports into Purniah from Nepál in Class I., during the same six months, is 63,647 *mans*, or 2330 tons, or more than four times the exports, a total which is only exceeded by the imports into Muzaffarpur and Champáran; and again five-sixths of

the whole were registered in the first three months of 1876. Of the total, paddy formed 41 per cent. ; mustard-seed, 24 per cent. ; rice, 18 per cent. ; jute, 4 per cent. In Class II. the most important items are—6311 buffaloes, and 1137 gunny-bags. The total of Class III. is Rs. 8704 ; of which miscellaneous native goods constitute 61 per cent., and a re-import of English piece-goods 25 per cent.

CAPITAL AND INTEREST.—As has been remarked on a previous page, it appears probable that coin is accumulating in the District, in consequence of the exports exceeding the imports. Most of the wealth thus acquired is converted into ornaments, and is not, as a rule, hoarded in the form of coin. Capital is employed by the larger merchants in the extension of their business, but as they are almost all non-residents, very little of it is devoted to the improvement of land in this District. Purniah is a productive country, but has not a rich commercial population, the trade being divided amongst an infinite number of petty traders. The current rate of interest on small loans, where the borrower pawns some article, such as an ornament or household vessel, is $37\frac{1}{2}$ per cent. per annum. When a mortgage is effected upon houses or lands, the rate usually is 12 per cent. per annum. For petty advances to the cultivator, the *mahdjan* or money-lender makes the agreement, that after the harvest of a certain crop, or certain land, the sum advanced is to be repaid in kind at a certain rate of interest per rupee, which is fixed according to the need of the borrower. Should the debtor fail to deliver the quantity of produce agreed upon, the interest due will be doubled in the following year, and so on. Thus very frequently the cultivators are unretrievably involved, and the money-lenders in time acquire rights in the land, which often are so widely extended as to raise them to the position of large landed proprietors. The only affluent bankers in the District are Rái Dhanpat Singh and Rái Lakshmipat Singh of Murshidábád, Bábu Mahesh Lál and Bábu Natched Lál, and Bábu Taran Mall. Loans are chiefly conducted by the village grain merchants, and, to a small extent, by petty shopkeepers.

INCOMES AND INCOME TAX.—There is no trustworthy information regarding the income derived in Purniah from any source except property in land ; and with regard even to the income of landed proprietors, the figures are of very doubtful accuracy. In 1871 the Collector made an estimate of the annual value of the agricultural

produce of the District, based, however, on very vague data. It amounted, according to his calculations, to four millions sterling, this result being arrived at in the following manner:—The total cultivated area of the District is 2,315,910 acres, of which 75 per cent., or 1,736,932 acres, is cultivated in rice; 2 per cent., or 46,318 acres, in wheat, etc.; 2 per cent., or 46,318 acres, in pulses, etc.; 11 per cent., or 254,750 acres, in oil-seeds; 1 per cent., or 23,159 acres, in indigo; 3 per cent., or 69,479 acres, in fibres; 3 per cent., or 69,477 acres in tobacco; and 3 per cent., or 69,477 acres, in vegetables, etc. Value of the rice at 15 *mans* per acre, or supposing a yield of 26,053,980 *mans*, at 12 *annas* per *man*, Rs. 19,198,155; wheat, etc., 13 *mans* per acre, or 602,134 *mans*, at Rs. 2 per *man*, Rs. 1,204,268; pulses, etc., 8 *mans* per acre, or 370,544 *mans*, at Rs. 1½ per *man*, Rs. 555,816; oil-seeds, at 8 *mans* per acre, or 1,938,000 *mans*, at Rs. 2. per *man*, Rs. 3,876,000; indigo, 5 *seers* per acre, or 2895 *mans*, at Rs. 240 per *man*, Rs. 694,800; fibres, 13 *mans* per acre, or 903,227 *mans*, at Rs. 5 a *man*, Rs. 4,516,135; tobacco, 13 *mans* per acre, or 903,201 *mans*, at Rs. 5 a *man*, Rs. 9,516,005; and vegetables, at 15 *mans* per acre, equal to Rs. 1,042,155: total, Rs. 40,603,334, or £4,060,333, 8s. od.

The operation of Act x. of 1871, the Road Cess Act, was intended to reach all incomes derived from land. The valuations completed in 1873 gave a total assessable income of £289,238.

In 1870-71 the net amount of income-tax received was Rs. 116,378 (£11,637, 16s. od.). The rate in that year was 3½ per cent., or 6 *pies* in the rupee, on all incomes above Rs. 500 (£50) per annum. This would show a total for all the incomes in the District above Rs. 500 of Rs. 3,724,096 (£372,409). The net amount of income tax received in 1872-73 was Rs. 24,739 (£2473, 18s. od.). The rate in that year was lowered one-third, to 1¼ per cent., or 3 *pies* in the rupee, and the minimum income assessable was raised to Rs. 750 (£75) per annum. This gives Rs. 2,374,956 (£237,495) as the approximate total of all incomes above Rs. 750.

The details for 1872-73 are as follow:—1 proprietor of land paid income tax on an income over £10,000 a year. The persons paying on incomes between £1000 and £10,000 were—5 indigo manufacturers, and 15 proprietors and sub-proprietors of land; total, 20. Those paying on incomes between £200 and £1,000 were—6 professors of law; 1 professor of medicine; 5 salaried clerks, bailiffs, and shopmen; 3 domestic servants; 27 bankers and money-lenders;

30 general merchants; 10 grain merchants; 2 traders in salt; 1 dealer in animals; 3 jute, flax, and hemp manufacturers; 2 indigo manufacturers; 114 proprietors and sub-proprietors of land; 4 tenants; 2 proprietors of houses: total, 210. Those paying on incomes between £200 and £100 were 611 in number, of whom 16 were professors of law; 6 salaried clerks, bailiffs, and shopmen; 7 domestic servants; 35 bankers and money-lenders; 5 general merchants; 4 piece-goods merchants; 59 grain merchants; 1 salt merchant; 3 traders in woven fabrics and dress; 1 trader in spirits, drugs, and tobacco, 2 traders in miscellaneous articles; 11 dealers in animals; 3 wholesale manufacturers of cotton goods; 16 wholesale manufacturers of jute, flax, and hemp; 143 proprietors and sub-proprietors of land; 86 tenants; 1 proprietor of houses; and 2 deriving interest from other sources than Government securities.

LAND REVENUE.—The earliest notice we have of the land revenue of the District is derived from Todar Mall's rent-roll for *sarkār* Purniah, which consisted of nine *mahāls* or estates. According to his assessment it was found to pay in revenue 6,408,633 *dāms*, of which 85,000 were taxes (*fil mahāl*) on elephants caught in the *tardī* jungles. The remaining eight *mahāls* were—Asonjá, present Asjá, paying 734,225 *dāms*; Jáirāmp, paying 467,785 *dāms*, Hávēli Purniah, paying 2,686,995 *dāms*; Dalmelpur, paying 671,530 *dāms*; Sultānpur, paying 602,206 *dāms*; Srīpur, paying 390,200 *dāms*; Katiyār, paying 590,100 *dāms*; and Kadhbá, paying 280,592 *dāms*. The total revenue, therefore, at the rate of 40 *dāms* to one Akhar-sháhi rupee, was in A D 1572 equal to Rs. 160,216. This, however, was derived from an area about three-fifths of that of the present District. The financial administration of Murshid Kullí Khán, which marks a most important era in Bengal revenue, was not extended to Purniah, or only in a very limited degree. As a frontier military province, the greater part of the land was assigned as *jágír* for the maintenance of troops. The *khálsá* or revenue-paying portion, which was included in the *chaklá* or chief revenue division of Akbarnagar, under the *parganá* denomination of Srīpur Dalmalpur, yielded Rs. 278,830. Of this amount, however, Rs. 180,166 were assigned to Sáif Khán, the *faujdar* or military governor from 1722 to 1752, as a *rakmí jágír* or personal grant of revenue, secured to the holding by a *sanad* or deed of gift. Although, during his time, there were large additions to the District area by conquest towards the north, and the accession of some *pargandás* from the west of the

Kúsi, yet the names, number, or valuation of the estates assessed to the crown rent underwent no alteration. Nor was any effective change made during the following administration of Saulat Jang, the son-in-law of Alí Vardí Khán, nor until the revolution that followed on the battle of Plassey, in 1757. The Nawáb of Murshidábád, Shujá Khán, seems to have made some effort to regulate this great estate. Sometime before his death in A.D. 1739, he redistributed its lands into a revenue-paying portion, valued at Rs. 214,854, and a *jágir* portion, valued at Rs. 129,374, —estimates which show a general increase of Rs. 65,280, and a revenue increase of Rs. 116,190. It was also subjected to considerable *abwábs* or cesses, which, it would seem, were never levied or brought to credit in the Murshidábád treasury, on whose books they were borne. These *abwábs* were the following:—*Khásnavísí*, a fee paid by the *zamíndárs* to the officers and clerks of the treasury, and supposed to amount to Rs. 2373. It is easy to understand that the powerful military chiefs of Purniah would not submit to this impost. The second was called *zar mahtút*, and consisted of four lesser component charges, viz. (1) *nazar punyá*, presents exacted from landholders at the time of the annual settlements; (2) *bhái khilát*, a fee taken from *zamíndárs* to recoup the Nawáb for the dresses of honour that he bestowed on them every year at the same period; (3) *pushtá bandí*, a charge for embanking the rivers in the vicinity of Murshidábád; (4) *rasúm nizárat*, a commission of 10 *ánnás* in every thousand rupees, levied by the officer in command of the treasury guard at Murshidábád on all revenue remittances from outlying Districts. The third, the *faujdári abwáb*, was the cause of much ill-feeling between the Purniah governors and the Murshidábád Nawábs, and it is almost certain it was never levied. It was an additional assessment of Rs. 283,027 on the revenue portion of the estate, extended northward during the administration of Sáif Khán. The *Chaut Mahrattá* of Rs. 24,018, if ever actually demanded, was not paid. The above facts, however, show that even when the power of the *faujdárs* was at its height, the land revenue demand amounted to over six and a half *lákhs* of rupees, and, in fact, was equal to the total assessment of the large northern *pargands* of Surjapur, Srípur, Sultánpur, and Háveli. Amongst the additions made by Sáif Khán, the tract in the west of the Kúsi was assessed at Rs. 355,773, no part of which ever found its way beyond his provincial treasury.

This state of things continued unchanged under the tyranny of Siraj-ud-Daulá and the feeble administration of Mír Jafar. About 1760, however, the pressing demands of the English made Mír Kásim All look around for new sources of revenue. The wealthy province of Purniah was one of the first to be examined and re-assessed. It was then discovered that its three last *faujddrs* had derived from it a land revenue of over 21 *lakh*s of rupees. The value of the rupee in those days was so uncertain that I cannot venture to state the amount in sterling. The re-assessment in the first year of its application brought in an actual increase of revenue or *káfíyat* of Rs. 1,523,725; and the total amount collected was Rs. 2,109,415, including Rs. 74,134 collection charges, Rs. 56,071 for the maintenance of frontier garrisons, and Rs. 33,805 paid away in State charity. The net land revenue of the District, therefore, was Rs. 1,945,405.

In the year 1874-75 the total receipts under this head were only Rs. 1,175,321, which amount was collected from a somewhat larger area than was included in the District when it first came under English Government. The gradual steps by which the great revenue of Purniah became thus diminished are very interesting, and have been given at considerable length by Mr. J. Grant, in his 'Historical and Comparative Analysis of the Finances of Bengal,' quoted in *The Fifth Report of the Select Committee on the Affairs of the East India Company in 1812*. 'The circumstances and changes,' he writes, 'in the administration of the finances of this province, merit the more particular attention, as they illustrate one of the grand principles of the original Mughul revenue administration, and may be useful in tracing some of the most enormous abuses of the present system to their primitive causes, through the indolence, ignorance, or depravity of natives entrusted with uncontrolled executive management. It was the great object of Akbar's policy, as it hath been of every wise and enlightened ruler of Hindustán, to secure the natural rights of the *rayats* or peasantry against the oppressions of their superiors, whether these were native representatives of former petty chieftains, superseded in power and forced to obey the more equitable laws of the Musalmán conqueror, or some of the long chain of their own officials, who linked together the two extremes of Eastern despotism under the subordinate denominations of *súbahddárí*, *faujddárí*, *amíldárí*, *samíndárí*, *chaudharí*, *talukddárí*, and *mukaddamí*. The fundamental maxim that limited the sovereign's demand of

rent from husbandmen to the *raba* or fourth of the gross yearly produce of the land, was liberal and humane ; while the established or prescriptive rule which allotted the remaining three-fourths to the cultivators, with perpetual occupancy of their fields, under the excellent though indefinite form of a *pattá* leasehold, gave them, in fact, a property in the soil and a share in the fruits of their own labour, rarely enjoyed in countries of European freedom. In the very few, though comparatively great, *zamíndáris* districts which have been subject to proper *hastobúd* (realization) investigations, no investigation was ever made into such unlawful exactions as might have been imposed by inferior agents. The clandestine profits of the principal farming landholders were the only objects of inquiry, as forming part, when within the *raba*, of the legal dues of the exchequer ; and the silence of the lower tenantry on the subject of any causes of complaint was interpreted as a negative proof that none existed. In the military provinces, on the other hand, and particularly this of Purniah, the financial inquiries of the State in discovering the genuine collections made throughout the country descended no farther than the *faujdár*, who could reckon many *zamíndáris* within the circle of his jurisdiction ; and it was only the private profits or public defalcations of Saulat Jang and his predecessor, Sáif Khán, that were realized, as before stated, under the denomination of *kádfiyat* (increase) to the royal treasury. The exercise of native chicanery, in taking advantage of the presumed ignorance of rulers, is here forcibly exemplified. The great secret of Hindustání financiers, in enriching themselves by defrauding Government, is seen to depend chiefly on the simple manœuvre of assuming the net *bandobast* (settlement) of one year, after deduction of ordinary charges, as the foundation or gross settlement of the next, introducing the same necessary *saranjamí* (collection) expenses a second time for subtraction ; repeating the operation again and again ; or, if found expedient, resuming the fictitious expenditure of a former year, and boldly stating it as an improvement of the ancient revenue, always sure to escape detection from a total want of any standard of comparison to be referred to by their comptrollers, showing either the utmost or the proper dues of the exchequer. Thus, in F.S. 1171 (A.D. 1764), Naláakumár (Nuncomar) reduced the net ascertained *málguzáris* (land revenue) of the province, stated three years before at 1,945,405 rupees, to 1,738,174 by re-introducing allowed *mufassal* charges. The succeeding ministry in

F.S. 1172 (A.D. 1765), on the Company's acquisition of the *diwani*, assumed, nevertheless, this last diminished *jamd*, clear of expense, as the basis of their gross settlement then concluded; but, not content with the surreptitious new *saranjami* deductions of their predecessors, they stated considerably more than the aggregate of the whole before admitted of, and giving themselves credit for the amount, being in all 365,637 rupees, reduced the actual net *handobast* of the year to 1,422,536 rupees. In F.S. 1173 (A.D. 1766), it seemed necessary to screen a conscious delinquent agency under favour of apparent improvement of the finances, by a pretended arbitrary increase throughout the *subah* of Bengal of more than 11 *lakhs*. Of this, Rs. 125,000 fell to the share of Purniah, which, with a diminution of about Rs. 2000 in the fraudulently-accumulated expenditure, raised the net effective demand of that year to Rs. 1,550,273, or the gross revenue to nearly the assumed standard of the proper original *hastobud mdlguzdri* (realized land revenue). On the annual adjustment of accounts, ample indemnification was taken for the nominal additional income by a real defalcation of Rs. 208,764, in the usual mode of incurred and, for the most part, irrecoverable balances, leaving a net collection of Rs. 1,341,509. Again, in F.S. 1175 (A.D. 1768), when a very able, upright, covenanted servant was deputed to investigate the state of the country, though his intelligence might not have been sufficiently acute to detect fallacious charges, nor his influence great enough to bring the fictitious surplus to public credit, yet he discovered that a total collection was made from *samindars*, in the name of Government, amounting to Rs. 2,135,387, inclusive of an exaction of Rs. 183,610 under the denomination of *sirfsikkd*, which, though stated to have been at this time imposed with the sanction of the British Supervisor, may, with almost certainty of truth, be considered of prior establishment. However this may be, a favourable report of the discovery made must have been the immediate cause, perhaps, of his recall, as well as of the increased net settlement of the year, now raised to Rs. 1,731,007. Notwithstanding all this, in the succeeding *handobast* (settlement) of F.S. 1176 (A.D. 1769), the effective demand of the exchequer was reduced suddenly to Rs. 1,342,000, probably on the plea of the famine which then began to be felt, if not by a new repetition of the whole *saranjami* (collection) deduction. To conclude the history of native management; in F.S. 1178 (A.D. 1771), the gross *jamdbandi*

was rated at Rs. 1,400,517, with only an incumbrance of Rs. 182,977, leaving a clear income of Rs. 1,217,540 expected to be forthcoming. If, under these successive fluctuations, it were asked on what principle they were brought about, no one can controvert the fact that they were the mere sleight-of-hand tricks of a crafty *mutasaddi*, corruptly subservient to the chicanery of his master, who himself was, in all probability, profoundly ignorant of every local circumstance that ought to influence a change, or entirely regardless of the measure of public receipts, provided there was no diminution in the standard of what came into his private coffers by barefaced speculation.'

Nor was the limit of the falling off in the revenue reached in 1771. In 1789, and down to the time of the Permanent Settlement, little more than Rs. 800,000 was collected, or only something more than one-third of the assessment of Mír Kásim. Besides this, 645,430 *bighás*, or 350,000 acres of land, had been separated from the revenue-paying area under various pretexts, principally as grants for charitable and religious purposes, but really collusively retained by landholders of different degrees.

SUBDIVISION OF ESTATES.—The land revenue in 1792, after the re-assessments which preceded the Permanent Settlement, and which were carried out in Purniah by Mr. Colebrooke, then Assistant Collector, was £124,926, 17s. 2d. There were at that time 36 estates and 38 registered proprietors or coparceners; of these, 6 estates were paying less than £10 a year in revenue; 9 paid between £10 and £100; and 21 above £100. The total land revenue from proprietors paying less than £10 was £23, 18s. 10d.; that from proprietors paying between £10 and £100, £398, os. 4d.; and that from proprietors paying over £100, £124,504, 18s. 0d. The average land revenue assessed on estates paying less than £10 a year Government revenue was £4, os. 2d.; between £10 and £100, £44, 4s. 0d.; above £100, £5928, 15s. 2d.; and the average land revenue paid by each proprietor or coparcener was £362, 11s. 10d. In 1850-51 there were 1345 estates paying less than £10 in Government revenue; 205 paying between £10 and £100, and 48 paying more than £100. The registered proprietors or coparceners numbered 3170, and the total land revenue amounted to £142,638, 6s. 0½d. The average land revenue from estates paying less than £10 a year in revenue was £3, 9s. 9½d.; that from estates paying between £10 and £100, £26, 14s. 7½d.;

and that from estates paying over £100, £2511, 1s. 4½d. The average land revenue paid by each proprietor or coparcener was £41, 4s. 7½d. In 1870-71 the land revenue amounted to £122,943, 12s. od. There were 1397 estates paying less than £10 a year in revenue; 204 paying between £10 and £100; and 41 paying more than £100. Of registered proprietors there were 2927. The average land revenue paid by estates having rentals of less than £10 a year was £3, 9s. 10½d.; that derived from estates paying between £10 and £100, £22, 14s. 4d.; and that derived from estates paying over £100, £2776, 14s. 10½d. The average land revenue paid by each proprietor or coparcener was £42, 2s. 10½d. In 1874-75 there were 1584 permanently settled estates, paying a revenue of £117,046, 4s. od.; 19 temporarily settled estates, the property of individuals, paying a revenue of £191, 12s. od.; and 26 Government estates, yielding a rental of £294, 6s. od. Total number of estates, 1629; and total land revenue, £117,532, 2s. od.

REVENUE AND EXPENDITURE.—The following statements illustrate the growth of the revenue and expenditure since the formation of the existing system of Government by Lord Cornwallis. The items for 1793 are stated by the Collector to have been extracted from an old, but exceedingly well drawn up, account book, resembling a *mahájan's* or native merchant's day-book, which was found after much search in the record room, and which is the only account in existence of the financial position of the District at that time. The regular books and returns for that and many subsequent years were destroyed under the record rules then in force. The statement for 1850-51 represents not so much the actual receipts and disbursements connected with the District administration, as the total of the fiscal operations of all kinds transacted in the treasury. The statement for 1870-71 is the first representing a true balance sheet of the District, unembarrassed by imperial charges and matters of mere account.

The gross revenue in 1792 was £127,847, 17s. od., which rose in 1850-51 to £214,110, 15s. 1½d. The gross expenditure of these two years was £127,936, 9s. 4d. in 1792, and £215,328, 16s. 7½d. in 1850-51. Omitting items of deposit and account, the particulars of which I have noted at the foot of the statements, the net receipts of 1792 were £126,049, 10s. 4d.; and of 1850-51, £157,690,

[Sentence continued on page 397.]

REVENUE AND EXPENDITURE OF THE DISTRICT OF PURNIAH FOR THE YEAR 1792.

REVENUE.	EXPENDITURE.
1. Land Revenue, £124,926 17 2 2. <i>Abkari</i> or Excise, 1,055 16 4 3. Costs realized through Civil Courts in Government Cases, 643 7 10	1. Remitted to Murshidabad, £66,852 12 2 2. Remitted to Bhagalpur, 10,725 0 0 3. Paid to Salaried Officers, 3,553 6 8
4. Sale Proceeds of Stolen Property, 66 14 8	4. Paid to Auditor of Accounts at Maldah, 23,153 17 4
5. Refunds by the Magistrate, 132 1 2	5. Military Pay Expenditure, 833 8 2
6. Half Salary and Fees payable to Collector, 1,009 17 8	6. Salary of Opium Officials, 6,576 1 0
7. Profit and Loss in Cases of Revenue Fines, 13 0 0	7. Postal Charges, 155 0 6
	8. Criminal Administrative Charges, 692 0 8
	9. Police Charges, 252 17 0
	10. Civil Court Charges, 806 2 2
	11. Compensation to Owners of Markets, 2,128 4 2
	12. Collection of Revenue Charges, 12,207 19 6
Total, £127,847 17 10	Total, £127,936 9 4

To obtain the net revenue, items Nos. 3, 5, 6, and 7 on the revenue side must be deducted, for the reasons given in the text. In the same way, to arrive at the net outlay, items Nos. 1, 2, and 4 must be deducted from the expenditure side. The net revenue of 1792, therefore, was £126,049, 10s. 4d., the net expenditure, only £27,204, 19s. 10d. For 1792, I have calculated the rupee at 2s. 2d., the value of the *sikka* rupee; for the other years, I have calculated according to the conventional rate of 2s. to the rupee.

REVENUE AND EXPENDITURE OF THE DISTRICT OF PURNIAH FOR THE YEAR 1850-51.

REVENUE		EXPENDITURE.	
1. Land Revenue,	£142,638 6 0	1. Revenue Remittance,	£114,869 9 0
2. <i>Admiral</i> or Excise,	5,472 8 0	2. Bills on Revenue Department,	33,164 16 6
3. Profit and Loss,	375 10 6	3. Payable to Mint Master,	23 4 4
4. Bills Payable to the Revenue Department,	1,698 11 5	4. Bills Payable in Military Department,	223 0 9
5. Bills on the North-West Provinces,	65 17 0	5. Bills Payable in North-West Provinces,	35 8 0
6. Revenue Deposit,	42,725 8 10	6. Post Office Remittance,	748 16 6
7. School Deposits,	3 16 4	7. Judicial Charges,	4,630 0 0
8. Post Office Remittance,	877 15 3	8. General Judicial Charges,	15,686 2 0
9. Judicial Remittance,	6,689 8 3	9. Revenue Deposit,	40,848 6 5
10. Military Orphan Fund,	5 11 0	10. Interest on Promissory Notes,	759 5 7
11. Bengal Military Fund,	14 16 0	11. General Revenue Charges,	3,216 9 4
12. Civil Fund,	255 6 7	12. Pensions,	37 12 2
13. Medical Fund,	27 0 0	13. Law Charges,	0 8 0
14. Civil Service Annuity Fund,	239 16 8	14. Stamp Charges,	527 7 3
15. Opium,	396 0 0	15. Medical Fund,	27 0 0
16. Court of Wards Receipts,	16 11 7	16. Bengal Military Fund,	14 16 0
17. Government of India,	3,410 0 0	17. Military Orphan Fund,	5 11 0
18. Stamps,	8,692 14 3	18. Education Charges,	36 0 0
19. Judicial Receipts,	336 17 8	19. Superintendent of the Marine Department,	10 8 0
20. Special Revenue Receipts,	108 1 4	20. Charges in the General Department,	160 0 0
21. Interest,	11 13 0	21. Profit and Loss,	302 17 4
22. Process Fee Fund,	15 9 8	22. Treasure Bags,	1 18 0
23. Law Receipts,	2 10 0		
24. Payable to Mint Master,	31 5 3		
Total,	£214,110 15 1	Total,	£215,328 16 7

To obtain the net revenue, items Nos. 3-14, 17, and 24 must be deducted from the revenue side, as matters of deposit or account.

To obtain the net outlay, items Nos. 1-6, 9, 10, 12, 15-17, 19, and 21, must be deducted from the expenditure side. The net revenue for 1850-51, therefore, was £157,690, 11s. 8d.; the net expenditure, £24,238, 4s. 7½d.

REVENUE AND EXPENDITURE OF THE DISTRICT OF PURNIAH FOR THE YEAR 1870-71.

REVENUE.	EXPENDITURE.
1. Land Revenue, . . . £222,943 12 0 2. Miscellaneous, . . . 87 4 0 3. <i>Abkari</i> or Excise, . . . 17,473 11 0½ 4. Stamps, . . . 12,940 15 9½ 5. Income Tax, . . . 11,623 16 0½ 6. Receipt on account of Police, . . . 347 15 10½ 7. Educational Receipts, . . . 90 2 0 8. Receipts connected with Law and Justice, 2,908 5 7½ 9. Local Fund Receipts, . . . 5,758 13 2½ 10. Post Office Receipts, . . . 5,275 4 8½	1. Education Charges, . . . £589 12 3½ 2. Postal Charges, . . . 1,149 16 4½ 3. Excise Establishment, . . . 1,213 8 0 4. Jail Maintenance, . . . 443 4 0 5. Public Works Department, . . . 2,744 3 6½ 6. Criminal Department, . . . 1,063 10 8 7. Registration Establishment, . . . 235 4 0 8. Telegraph, . . . 1,705 19 0 9. Civil Courts Establishment, . . . 7,813 9 4 10. Revenue Establishment, . . . 4,314 19 0 11. Magisterial Charges at Headquarters, 1,177 13 7½ 12. Subdivisional Establishments, . . . 1,478 14 4½ 13. Income Tax Establishment, . . . 337 13 1½ 14. Regular and Municipal Police, . . . 8,511 12 0 15. Charges debited to Local Funds, . . . 5,052 12 9
Total, £179,449 0 4½	Total, £37,831 12 1½

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11s. 8½d. : the net expenditure in 1792 was £27,204, 19s. 10d. ; and in 1850-51, £24,258, 4s. 7½d. Thus, in the first half of the century there was a large increase of revenue and diminution of expenditure, the latter being due to the withdrawal of military forces from Purniah, and to the great decrease in the cost of collecting revenue. The year 1870-71, in which the net receipts amounted to £179,449, os. 4½d., and the expenditure to £37,831, 12s. 1½d., shows a considerable increase under both heads. The increased revenue is the more noticeable, as since 1850 there had been large transfers to Maldah and to Bhágalpur, involving a loss in land revenue of £20,000. This loss, however, was met by a threefold increase in excise receipts, a much larger sale of stamps, and the imposition of an income tax. The additional expenditure was generally distributed through all the departments of District administration.

PROTECTION TO PERSON AND PROPERTY has steadily improved. It is not known how many magisterial and revenue courts there were in 1793, which is the first year of which any records remain ; but there were then two civil courts. In 1800 there were three magisterial courts, two civil, and two revenue courts ; in 1850 there were five magisterial and twenty-four civil and revenue courts ; in 1862 there were nine magisterial and nineteen civil and revenue courts ; in 1869 there were eight magisterial and thirteen civil and revenue courts. The number of covenanted officers at work in the District throughout the year was four in 1850, three in 1862, and four in 1869.

RENT SUITS.—The number of rent cases instituted under the provisions of Act x. of 1859 and Act viii. (B.C.) of 1869—the Rent Laws of Bengal—are returned by the Collector as follows :—In 1861-62, 5516 original suits, with 2022 miscellaneous applications ; in 1862-63, 5258 original suits, with 1728 miscellaneous applications ; in 1866-67, 4983 original suits, with 5386 miscellaneous applications ; in 1868-69, 4029 original suits, with 4632 miscellaneous applications ; in 1870, there were 843 suits ; in 1871, 2338 ; and in 1872, 1771. It will be seen that the number of suits has greatly fallen off since the introduction of Act viii. of 1869, the total for the three years 1867 to 1869 being 9012, and that for 1870 to 1872, 4952. During the former period, these cases were triable by the revenue courts of the Collector and his subordinates, and during the latter, by the ordinary civil courts.

POLICE STATISTICS.—For police purposes, Purniah is divided into

thirteen police circles or *thánás*, as follows :—In the Headquarters Subdivision—(1) Purniah, with outposts at Thomasganj and Hardá, and a force consisting of 1 inspector, 1 sub-inspector, 2 head constables, and 16 constables. (2) Damdahá, with a force consisting of 1 sub-inspector, 2 head constables, and 12 constables. (3) Gondwára, with an outpost at Kárágolá, and with a force consisting of 1 sub-inspector, 2 head constables, and 18 constables. (4) Manfhárf, with a force consisting of 1 sub-inspector, 1 head constable, and 12 constables. (5) Kadbá, with an outpost at Sáifganj, and a force consisting of 1 inspector, 1 sub-inspector, 3 head constables, and 20 constables. (6) Balrámpur, with an outpost at Rániganj, and a force consisting of 1 sub-inspector, 3 head constables, and 16 constables. (7) Kásbá Amúr, with outposts at Dingra and Balgachhí, and a force consisting of 1 sub-inspector, 4 head constables, and 20 constables. (8) Aráriyá, with an outpost at Siktí, and a force consisting of 1 inspector, 1 sub-inspector, 3 head constables, and 20 constables. (9) Rániganj, with an outpost at Púrání, and a force consisting of 1 sub-inspector, 2 head constables, and 16 constables. (10) Matiyárf, with outposts at Kuárf and Nawábganj, and a force consisting of 2 sub-inspectors, 3 head constables, and 20 constables. (11) Bahádúrganj, with an outpost at Digalbank, and a force consisting of 1 sub-inspector, 3 head constables, and 18 constables. (12) Krishnaganj, with outposts at Goálpukhur, Asurgarh, and Láhil, and a force consisting of 1 inspector, 1 sub-inspector, 5 head constables, and 30 constables. (13) Káliáganj, with outposts at Ilwabárf, Kálughát, Gaisál, Chaprá, and Bhútgóon, and a force consisting of 1 sub-inspector, 7 head constables, and 36 constables. The remainder of the regular police is employed on the following services. Magazine and Quarter guard, 1 head constable and 4 constables; guard at the Magistrate's Courts, 1 inspector, 2 sub-inspectors, 3 head constables, and 19 constables; guard at the District and Subdivision jails, 2 head constables and 17 constables; guard at the District and Subdivisional treasuries, 4 head constables and 24 constables; reserve in the lines, including men sick and on leave, 1 inspector, 2 sub-inspectors, 7 head constables, 74 constables, and 1 drill instructor of the grade of head constable.

THE REGULAR POLICE, or constabulary force, stood thus in 1875 :—Two superior European officers, namely, a District Superintendent and an Assistant-Superintendent, at a total salary of £1680 a year; 6 subordinate officers called inspectors, on salaries

varying from £120 to £240 per annum ; 18 subordinate officers, called sub-inspectors, on salaries varying from £60 to £96 per annum ; and 60 inferior officers, called head constables, on salaries varying from £12 to £30 a year—all maintained at a total annual cost of £6687, 12s. od., or an average pay for all subordinate and inferior officers of £79, 12s. 3½d. per annum ; 398 constables, divided into four grades, and each receiving annual pay varying from £7, 4s. od. to £10, 16s. od., and maintained at a total annual cost of £3285, 12s. od., or an average pay of £8, 5s. 1d. per annum for each man. The other expenses connected with the District police are :—A sum of £141, 6s. 3d. allowed as travelling expenses for the Superintendent and Assistant-Superintendent ; £233, 8s. od. for pay and travelling allowances for their establishments ; and £642, 8s. 11d. for contingencies,—bringing up the total cost of the regular police of the District to £10,990, 7s. 2d. The Census Report of 1872 returns the area of the Purniah District at 4957 square miles, and the population at 1,714,795 souls. Compared with these figures, the total strength of the regular police force is one man to every 10·24 square miles of the District area, or one man to every 3543 of the population. The annual cost of maintenance is equal to a charge of £2, 14s. 4d. per square mile of area, or about 1½d. per head of the population.

THE MUNICIPAL POLICE is a small force maintained in the large towns. In 1875 it consisted of 6 officers, head constables, fourth grade, on salaries of £12 a year ; and 120 constables, receiving pay at the rates of 10s. and 12s. a month, the whole body being maintained at an annual cost of £878, 8s. od. A further sum of £115, 4s. od. was allowed for clothing and contingencies, such as repairs, lighting, etc., bringing up the total cost of the municipal police of the District to £993, 12s. od., or, for the town of Purniah, £655, 12s. od. annually ; for the town of Krishnaganj, £258, 16s. od. annually ; and for the town of Rániganj, £79, 4s. od. annually. These charges are defrayed by means of rates levied from the householders and traders living within municipal limits. The Census Report of 1872 returns the total population of the three municipal towns of the District at 30,691 souls, and the number of houses at 6487. The strength of the municipal police, therefore, as compared with the population, gives one man to every 245·6 souls ; the whole force being maintained at a cost of very

nearly 7½d. per head of the town population, or at the rate of 3s. 0¾d. to each house.

VILLAGE WATCH.—In 1866, Mr. M'Neile, in his report on the village watch of the Lower Provinces of Bengal, returned the number of rural police in Purniah, distinguished into four classes, as follows:—(1) *Chaukidárs*, 6604, of whom 8 were maintained by grants of land, amounting to 40 standard *bighás* or 13½ acres, held on a service tenure, 32 maintained by the *zamindárs*, and 6564 by the villagers. (2) Jolahá and Dosádh *chaukidárs*, all maintained by the villagers. (3) Jolahá, Dosádh, and Márkandái *chaukidárs*, 393, maintained by the villagers; and (4) *goráits*, 984, maintained by the *zamindárs*: total, 8344. The District Superintendent of Police in 1875 reported that there were 6798 *chaukidárs* of all classes, maintained entirely by contributions from the people, at a total estimated cost of £24,472, 16s. od. annually. This would give an average yearly income of £3, 12s. od. per man; but the village watch levy various perquisites from the hamlets to which they are attached. Each village watchman or rural policeman has, on an average, charge of 46 houses.

The following statement shows the religions and castes of the regular and municipal police on the 21st September 1875, as returned to me by the District Superintendent:—Officers—Christians, 2; Muhammadans, 40; Hindus, 48, including 12 Bráhmans, 11 Rájputs, 2 Sikhs, 16 Káyasths, and 6 of 'other' castes. Men—Christian, 1; Muhammadans, 108, Hindus, 409; including 105 Bráhmans, 148 Rájputs, 8 Gurkhás, 11 Sikhs, 11 Santáls, 24 Káyasths, and 102 of 'other' castes. No separate caste return for the rural police has been submitted to me, but it is stated that that force is derived for the most part from Dosádhs, Jolahás, Hárís, and Tíors. Their present number is said to be 6798, distributed as follows:—Headquarters Station, 432; Gondwára, 332; Damdahá, 306; Kásbá Amúr, 731; Káliáganj, 825; Krishnaganj, 402; Aráníyá, 641; Matiyárl, 357; Ráníganj, 323; Kadbá, 713; Balrámpur, 416; Manihárl, 177; and Bahádurganj, 1143.

THE WORKING OF THE POLICE in Purniah District has not, for many years past, been satisfactory. The climate, which is peculiarly unhealthy for natives, prevents well-trained officers from other parts of the Lower Provinces taking service in Purniah; while those obtained from the District itself are under-educated, and have not been found to possess other qualifications necessary for police work. In his report for the year 1874, the Inspector-General of Police

writes that Purniah figures very badly in the returns. The proportion of acquittals to convictions is markedly high.

The increasing prevalence of *ddkditis* or gang robberies in the early part of the year attracted the attention of the Government, and special measures were in consequence adopted. A detective department was organized; bad characters were watched, better discipline was enforced amongst the rural police, who were brought into closer relations with the district police; and liberal rewards were offered. Out of the thirty 'true' cases reported during the year, only three occurred in the second half of the year, after the adoption of these special measures.

The following table (p. 402) shows the result of the investigation and prosecution of the chief crimes cognisable by the police for the years 1865, 1870, and 1875. As regards the reported crime for 1865, the District Superintendent has very little doubt that the figures are not trustworthy, but thinks that for purposes of comparison they may have some value. It would seem from the records from which the return is derived, that there were in that year no cases of grievous hurt, house trespass, or vagrancy, and no offences against the excise laws,—a very improbable state of things. Criminal breach of trust was not cognisable in the year 1865, and evidently the classification of some other offences in 1865 was different from what it now is. There is no such marked difference between the returns for 1870 and 1875 as to call for particular comment, except as regards crimes against property, the increase in the number of which is probably due rather to more correct reporting than to actual increase in crime. It will be observed that crimes against property have been always numerous, and that the police have generally failed to cope with them.

JAIL STATISTICS.—There is one jail at Purniah town, and also lock-ups at the Subdivisional stations of Aráryá and Krishnaganj. The following figures show the position of the Purniah jail in the years 1857-58, 1860-61, 1870, and 1872. For the first two of these years the figures are of doubtful accuracy. In the last two years, the introduction of returns of improved form has secured a really accurate record of facts connected with the jail —

In the year 1857-58, the first year for which materials are available, the daily average number of prisoners in the Purniah jail was 402; the total number of criminal, civil, and under-trial prisoners

[Sentence continued on page 403.

COMPARATIVE STATEMENT OF THE PRINCIPAL OFFENCES DIRECTLY COGNISABLE BY THE POLICE IN THE
YEARS 1865, 1870, AND 1875, IN PURNIAH DISTRICT.

DESCRIPTION OF CRIME.	1865.					1870.					1875.			
	Cases.	Persons.			Cases.	Persons.			Cases.	Persons.				
		Number under Trial.	Number Dis- charged or Acquired.	Number Convicted.		Number under Trial.	Number Dis- charged or Acquired.	Number Convicted.		Number under Trial.	Number Dis- charged or Acquired.	Number Convicted.		
Rioting or unlawful assembly,	7	36	1	35	95	224	126	98	34	167	34	167	49	88
Murder,	9	13	4	9	8	8	4	4	11	31	11	31	24	2
Culpable homicide,	6	10	6	1	5	4	2	2	9	9	9	9	9	9
Rape,	6	4	3	...	1	...	3	...	4	...	4	...	...	...
Grievous hurt,,	...	...	...	...	12	6	7	3	13	13	13	13	4	7
Hurt by dangerous weapons,	8	12	8	...	12	13	7	3	8	10	8	10	2	3
Kidnapping or abduction,	329	217	90	50	599	56	12	44	409	56	409	56	21	34
Lurking house trespass or housebreaking,	112	154	82	27	48	59	28	31	94	65	94	65	45	18
Wrongful restraint and confinement,	16	117	89	33	18	53	32	21	7	27	7	27	14	13
Damage or gang robbery,	20	22	19	1	12	4	...	4	5	1	5	1	1	...
Robberies,	19	14	7	5	6	7	1	6	47	34	47	34	22	10
Serious mischief,	48	94	30	54	33	12	5	7	86	154	86	154	41	101
Receiving stolen property habitually,	437	555	243	217	199	116	41	75	1001	386	1001	386	185	185
Theft,	...	...	...	...	33	13	4	9	58	22	58	22	14	7
Criminal breach of trust,,	220	179	58	85	53	56	35	21	196	99	196	99	35	54
House trespass,	...	...	...	...	14	12	2	10	107	113	107	113	12	101
Offences against vagrancy and bad liveli- hood laws,	...	...	...	...	24	27	4	23	33	46	33	46	7	35
Offences against excise laws,	41	81	35	47	63	87	1	86	49	50	49	50	6	44
Public and local nuisances,	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Sentence continued from page 401.]

admitted during the year was 640. The discharges were as follows :—Transferred, 35 ; released, 548 ; escaped, 6 ; died, 41 ; executed, 4—total, 634. In 1860-61 the jail returns show a daily average prison population of 330, the total number of prisoners admitted during the year being 770. The discharges were—Transferred, 70 , released, 604 ; escaped, 5 ; died, 59—total, 738. In 1870 the daily average jail population was 325, the total number of prisoners admitted during the year being 833. The discharges were—Transferred, 35 ; released, 773 ; died, 13—total, 821. The foregoing figures are given in a special return furnished by the Inspector-General of Jails. In 1872 the average number of prisoners was 304, of whom 3 were civil, 17 under trial, 267 labouring convicts, and 17 non-labouring convicts ; 255 were females. The male convict wards are intended to hold only 126 prisoners.

The percentage of prisoners admitted to hospital in the Purniah jail in 1857-58 was 68·03, and the number of deaths 1·02 per cent. of the mean jail population. In 1860-61 the percentage of admissions to hospital rose to 155·15 per cent., and the death-rate to 17·87 per cent. of the average jail population. In 1870 the admissions to hospital had fallen to 90·46 per cent., and the death-rate to 4·00 per cent. of the average prison population. The death-rate of 1872 was high, amounting to 20 deaths, or 6·58 per cent. of the total jail population. This was generally attributable to the malarious character of the country which supplies the jail. The principal cause of deaths was dysentery. The standard of health of the prisoners on admission is very low, and it is found that, as a rule, they gain in health and weight during their incarceration. The jail was somewhat overcrowded ; and the Inspector-General, on his visit of inspection, expressed an opinion that the prisoners were scantily clothed for such a damp and occasionally cold District.

The average cost of maintenance per prisoner in Purniah jail, including rations, establishments, hospital charges, clothing, contingencies, and all other expenses except the prison police guard, is returned as follows :—In 1857-58 it was £3, 8s. 9½d. per head ; in 1860-61, £3, 14s. 0½d. ; and in 1870-71, £4, 7s. 4½d. The cost of the jail police guard in 1870 amounted to an average of £1, 1s. 2½d. per head, making a gross charge to Government in that year of £5, 8s. 6½d. per prisoner.

THE JAIL MANUFACTURES and other work performed by the

hard-labour prisoners contribute but little towards the expense of the jail. In 1857-58 the receipts arising from the sale of prison manufactures, and the value of stock remaining on hand, amounted to £486, 19s. 8d., and the charges to £278, 4s. 3½d., showing an excess of receipts over charges of £208, 15s. 4¾d., equal to an average earning of £2, 9s. 9½d. by each prisoner employed in manufactures. In 1860-61 the receipts from sale of manufactures, and the value of stock left in hand at the end of the year, amounted to £963, 12s. 1d., and the charges to £625, 10s. 9d., leaving an excess of receipts over charges of £338, 1s. 4d.; average earning by each prisoner employed on manufactures, £1, 19s. 9¼d. In 1870-71 the receipts from jail manufactures amounted to £1238, 5s. 3d., and the charges connected with them to £727, 4s. 10¾d.; excess of receipts over charges, £511, os. 4½d.; average earnings of each prisoner employed on manufactures, £3, os. 5¾d.

In 1872, the total cost of jail maintenance, exclusive of charges for buildings, repairs, and the whole manufacturing department, amounted to £1557, 17s. 11½d. per annum, or £5, 2s. 6d. per prisoner; of which diet expenditure was debited with £728, 15s. 3d., or £2, 8s. 7¼d. per prisoner, and the jail office establishment with £652, 1s. 2¾d., or £2, 2s. 10¾d. per prisoner. The cost of buildings and repairs was £295, 9s. 3d. The expenditure in the manufacturing department was £835, 5s. 4d., and the remittances to the treasury on account of sale of articles manufactured in the jail was £1100, 12s. 3¾d.; leaving a net profit for the year of £265, 6s. 11¾d., or a profit per individual prisoner sentenced to labour of 19s. 11d., and per manufacturing prisoner of £1, 14s. 7½d. Of the total average number of prisoners in 1872, 10 were employed as convict warders, 33 as jail servants (cook, sweepers, etc.), 28 in garden cultivation, 15 in gunny weaving, 13 in oil-pressing, 61 in string and twine making, 12 in carpet making, 24 in other manufactures, and 11 under the Department of Public Works.

EDUCATION STATISTICS.—Education of all kinds, but particularly primary education, has been very widely diffused in Purniah District since twenty years ago, a most remarkable improvement having taken place in this respect within the last five years. This improvement is due to the recognition by Government of the existing village schools of the country, and the distribution to them of an adequate, but not too liberal, aid. The number of Government and aided schools has increased from 1 in 1856-57, to 6 in 1860-61, 12 in 1870-

71, and 347 in 1874-75. The total number of pupils has risen from 66 in 1856-57 to 319 in 1860-61; it fell to 288 in 1870-71, and again rose to 8744 in 1874-75. There were also 183 private and unaided schools returned by the Inspector of Schools in 1874-75. These were subject to inspection, and were attended by an estimated number of 1781 pupils, the average number attending each school being 9.

The following comparative tables (pp. 406 and 407), compiled from the Reports of the Director of Public Instruction for 1856-57, 1860-61, 1870-71, show the number of Government and aided schools in the District in each of these years, the number of pupils attending them, the cost of education to Government, and the amount realized by fees or from private sources. The greatly increased proportion of the cost of education borne by private contributions, which has risen from £47, 8s. 1½d. in 1856-57 to £1078, 17s. od. in 1874-75, testifies to the general interest which is now being taken by the people themselves in the cause of education. The cost of schools to Government has increased from £272, 9s. 3½d. to £1741, 11s. 6½d. The most marked improvement is in the aided vernacular schools, which have risen from 1 in 1870-71 to 329 in 1874-75; while the scholars in the same period have increased from 9 to 8079. In 1874-75 the number of Government and aided schools amounted to 347, and the number of pupils to 8744; of whom 5067 were Hindus, 3667 Muhammadans, and 10 of other denominations not separately returned. Regarding the social status of the pupils, 33 belonged to the upper, 766 to the middle, and 7945 to the lower classes.

The total number of Government, aided, and private schools in Purniah District returned in 1874-75 by the Inspector of Schools, Behar Circle, amounted to 512, and the estimated number of pupils attending them was 9860; this would give 1 school to every 9·68 square miles of area, and 1 to every 3349 of the population, attended by 1 student for every 174 of the population. Excluding the 7 girls' schools, attended by 109 pupils, the result shows 505 schools for the male population, attended by 9751 boys. Taking the male population at 876,320, this gives 1 school for every 1735 males, and 1 boy attending school for every 89·87 of the male population.

The tabular statement of schools in 1874-75 given on p. 408, supplied to me by the Inspector of Schools, exhibits the state of public instruction in a somewhat different form, and indicates the number of unaided schools and pupils in the District.

RETURN OF GOVERNMENT AND AIDED SCHOOLS IN PURNIAH DISTRICT FOR THE YEARS
1856-57, 1860-61, AND 1870-71.

CLASSIFICATION OF SCHOOLS.	NUMBER OF SCHOOLS.			NUMBER OF PUPILS.											
				HINDUS.			MUHAMMADANS.			OTHERS.			TOTAL.		
	1856-57	1860-61	1870-71	1856-57	1860-61	1870-71	1856-57	1860-61	1870-71	1856-57	1860-61	1870-71	1856-57	1860-61	1870-71
1. Government English School,	1	1	1	41	51	32	25	22	11	..	1	5	66	74	48
2. Government Vernacular Schools, . . . . .	.	5	8		155	89		90	108	.	..	..	..	245	197
3. Government Institution for Special Education, . . . . .		.	1		..	2	.	..	9	..	..	..	..	..	11
4. Aided English School, . . . . .	..	..	1		..	8	..	..	15	..	..	..	..	..	23
5. Aided Vernacular School, . . . . .	..	..	1		..	.	..	..	9	..	..	..	..	..	9
Total,	1	6	12	41	206	131	25	112	152	..	1	5	66	319	288

RETURN OF GOVERNMENT AND AIDED SCHOOLS IN PURNIAH DISTRICT—continued.

CLASSIFICATION OF SCHOOLS.	Cost to Government			Amount realized from Fees and Private Contributions.			TOTAL COST.		
	1856-57.	1860-61.	1870-71.	1856-57.	1860-61.	1870-71.	1856-57.	1860-61.	1870-71.
Government English School,	£ s. d. 272 9 3½	£ s. d. 293 2 5½	£ s. d. 261 12 0	£ s. d. 47 8 1½	£ s. d. 45 10 0	£ s. d. 65 0 10½	£ s. d. 319 17 5½	£ s. d. 338 12 5½	£ s. d. 326 12 10½
Government Vernacular Schools,		31 6 10	184 4 0½	...	23 2 1½	29 19 5½		54 8 11½	214 3 6
Government Institution for Special Education,		..	242 19 0½	...		...	...	..	242 19 0½
Aided English School,	...	...	53 13 4½	...		78 8 6½	...	...	132 1 11½
Aided Vernacular School, . . . . .	...	...	3 10 0	...		1 4 0		...	4 14 0
Total,	272 9 3½	324 9 3½	745 18 5½	47 8 1½	68 12 1½	174 12 10½	319 17 5½	393 1 5	920 11 4½

RETURN OF SCHOOLS IN PURNIAH DISTRICT IN 1874-75.

Description of Schools.	Number of Schools on 31st March 1875.	Number of Pupils attending on the 31st March 1875.	Average Attendance.	Number of Masters.	RECEIPTS.			TOTAL COST.
					Fees and Fines.	Government Grant.	Local Sub- scriptions.	
<i>Higher School—</i> Government,	1	112	69	5	£ s. d. 99 0 10½	£ s. d. 225 17 10½	£ s. d. 4 2 0	£ s. d. 329 0 9
<i>Middle Schools—</i> Aided English,	4	139	91	11	18 16 6	201 8 10½	245 12 7½	465 18 0
Unaided English,	4	48	39	4	..	..	57 0 0	57 0 0
Government Vernacular,	5	270	195	10	16 19 7½	88 12 5½	5 8 0	111 0 1½
Total,	13	457	325	25	35 16 1½	290 1 4½	308 0 7½	633 18 1½
<i>Primary Schools—</i> Aided,	329	8079	6998	331	533 15 6½	916 5 6½	121 0 6½	1571 1 7½
Unaided,	182	1731	1416	182	263 2 7	..	114 12 0	377 14 7
Total,	511	9810	8414	513	796 18 1½	916 5 6½	235 12 6½	1948 16 2½
<i>Normal School—</i> Government,	1	35	34 8	2	..	241 3 7	..	241 3 7
<i>Girls' Schools—</i> Aided Girls' Schools,	7	109	97	7	..	13 10 1½	..	13 10 1½
Total Government and Aided,	347	8744	7484 8	366	668 12 6½	1686 18 6½	376 3 1½	2731 14 2½
Total Unaided,	186	1779	1455	186	263 2 7	..	171 12 0	434 14 7
Grand Total,	533	10,523	8939 8	552	931 15 1½	1686 18 6½	547 15 1½	3166 8 9½

PRIMARY EDUCATION.—There has been a remarkable increase in the amount and quality of this order of education given in Purniah District during the five years ending 1875. The following figures are derived from the Report of the Deputy-Inspector of Schools for the official year ending the 31st March 1875. On that date there were in the District 315 aided *páthsháls*, 14 *maktabs*, and 7 girls' *páthsháls*, attended by 7742 boys, 337 boys, and 109 girls respectively; the average daily attendance being 6772, 266, and 97 respectively. At the close of the previous year there were 226 *páthsháls*, 25 *maktabs*, and 6 girls' *páthsháls*, so that in the short period of one year 124 *páthsháls* and 2 girls' schools had been established, of which 30 were newly founded, and 96 were old village schools to which aid had been given. During the same period, 37 *páthsháls*, 9 *maktabs*, and 1 girls' school had been abolished on account of the falling off in attendance and the indifference of the cultivating classes to the education of their children. Of the above existing schools, there were in the Headquarters Sub-division 172 boys' schools and 1 girls' school; in the Aráriyá Sub-division there were 94 boys' schools and 5 girls' schools; and in the Krishnaganj Subdivision there were 63 boys' schools and 1 girls' school. The distribution of these schools according to the police circles in which they were situated, and the languages taught in them, is as follows:—In the Headquarters police circle—Hindí, 47 boys' schools and 1 girls' school; total, 48. Amúr-Kásbá—Hindí, 33 boys' schools; Bengali, 3 boys' schools and no girls' school; total, 36. Gondwára—Hindí, 18 boys' schools and no girls' school. Kadbá—Hindí, 29 boys' schools; Bengali, 4 boys' schools and no girls' school; total, 33. Manihárl—Hindí, 5 boys' schools; Bengali, 3 boys' schools; total, 8. Damdahá—Hindí, 10 boys' schools; total, 10. Balrámpur—Hindí, 9 boys' schools; Bengali, 11 boys' schools; total, 20. Aráriyá—Hindí, 52 boys' schools; Hindústání or Persian, 1 boys' school and 3 girls' schools; total, 56. Matiyárl—Hindí, 18 boys' schools and 1 girls' school; total, 19. Rániganj—Hindí, 23 boys' schools and 1 girls' school; total, 24. Krishnaganj—Hindí, 7 boys' schools; Bengali, 1 boys' school; Hindústání or Persian, 1 boys' school; total, 9. Bahádurganj—Hindí, 22 boys' schools; Hindústání or Persian, 6 boys' schools and 3 girls' schools; total, 31. Káliaganj—Hindí, 16 boys' schools; Bengali, 3 boys' schools; Hindústání or Persian, 3 boys' schools and 2 girls' schools; total, 24. Classed according to merit, they do not show a high

state of proficiency, only 26 *páthśálds* being ranked as good, 39 as fair, 82 as moderate, 131 as indifferent, and 58 as bad. Of the total number of pupils before mentioned, 1550 boys and 9 girls could read and write easy sentences in their mother tongue. Still, the progress in numbers of pupils and regularity of attendance has been very great; and it would seem from the educational reports that the matter and quality of instruction have improved also. The old village schools were held in the house of some leading man, a landholder or a merchant; and the teacher was expected to devote his chief attention to the children of this man, who was his patron. A few boys were also admitted from outside; but it is evident that many more reasons operated to prevent their attendance than in the case of a public school. The teacher also often performed other offices for his patron, and consequently the time of instruction varied much from one to another hour of the day, as well as in duration.

Under the present system of supervision, combined with Government aid, there has been a great change. Registers of the attendance of pupils are regularly kept, and the boys are divided into classes. The *gurus* are obliged to teach from 6½ to 10 in the morning, and again from 2 to 5 in the afternoon. Measures have also been taken that during the slack period of the rainy season the teachers should improve themselves, either by attending the Normal School or by private studies. There were 97 aided *páthśálds* and 19 *maktabs*, with 2273 boys, on the 31st March 1873, before the *páthśáldá* system came into force. The number of aided primary schools at the close of the year 1874-75 was 336, with 8188 pupils, against 257 schools, attended by 5841 pupils, on the same day of the year 1873-74. In other words, the number of schools and of pupils attending them has increased by 220 schools and 5915 pupils respectively within the period of two years, and by 119 schools and 2346 pupils within the year 1874-75. The average daily attendance of pupils rose from 4702 to 7095 within the latter period.

It has been observed that in all the primary schools, excepting those in the eastern parts of the District—that is, in police circles Manihárl, Kadabá, Balrámpur, and Krishnaganj—Hindi-Kaithí is the only language taught; except that in some of the *páthśálds* the writing of the Deva-Nágarí character is also acquired. In such schools the teachers employed are trained men, from the middle vernacular and Purniah normal schools. The language taught in *páthśálds* in the eastern part of the District is the corrupt form of mixed Hindí and

Bengal, spoken by the residents of those places. In all the *pāthsāls* within the limits of the Aráriyá Subdivision, Hindí-Kaithí is taught; but there are 5 *pāthsāls* in which Deva-Nágarí has been also introduced. In the schools within the jurisdiction of the Krishnaganj Subdivision, the Hindí, Bengal, Persian, and Hindustání languages are all taught, according to the wants of different local communities. Besides these languages, arithmetic up to simple division, practical *bászár* accounts, including *kharídbikr* or book-keeping by single entry, and mensuration on the native system, are practised.

The total expenditure during 1874-75 on all primary schools amounted to £981, 19s. 1½d. contributed by Government, and £694, 12s. 10½d. derived from private subscriptions. The average annual grant in aid to each primary school was £2, 18s. 5½d. from Government, in addition to £2, 1s. 4½d. from private sources. The Government grant to teachers was reduced or raised according to the efficiency of the schools, and the amount of their private income. At the end of 1875, in the Headquarters Subdivision, there were 10 schools receiving grants in aid at the rate of 10s. a month, 2 schools at the rate of 9s. a month, 14 at the rate of 8s. a month, 8 at the rate of 7s., 121 at the rate of 6s., 14 at the rate of 5s., 2 at the rate of 4s., and 1 school at 3s. a month. In the Aráriyá Subdivision, there were 2 schools receiving grants in aid at the rate of 10s. a month, 3 at the rate of 8s., 2 at the rate of 7s., 36 at the rate of 6s., 1 school at 5s. 6d. a month, 23 at 5s., 23 at 4s., and 4 at 3s. a month. In the Krishnaganj Subdivision, there were 12 schools receiving grants in aid at the rate of 10s. a month, 20 at the rate of 8s., 23 at the rate of 6s., 2 schools at 5s., and 6 at 4s. a month. In the whole District, there were 24 schools receiving grants in aid of 10s. a month, 2 receiving 9s. a month, 37 receiving 8s., 10 receiving 7s., 180 receiving 6s., 1 receiving 5s. 6d., 39 receiving 5s., 31 receiving 4s., and 5 schools receiving 3s. a month. The rate of aid to the girls' *pāthsāls* is one rupee or 2s. for every five girls attending.

Of the aggregate number of pupils in the aided primary schools, 4702 were Hindus, of whom 20 belonged to the upper classes, 380 to the middle, and 302 to the lower classes; and 3486 were Muhammadans, of whom 11, 166, and 3309 belonged respectively to the upper, middle, and lower classes.

There were 4318 boys who paid from 1 to 4 *annas* or 1½d. to 6d.

a month to the *gurus*, according to previous custom, independent of the salary received by the *gurus* from Government. A large number of the villagers, however, have withdrawn their support, and others have reduced the amount of fees which they before paid, since the grant-in-aid system has been applied.

In the Headquarters Subdivision there were 50 certificated teachers, and 125 employed without a certificate—total, 175; in the Aráriyá Subdivision there were 23 certificated teachers, and 80 employed without a certificate—total, 103; in the Krishnaganj Subdivision there were 16 certificated teachers, and 48 employed without a certificate—total, 64. Total number of teachers in Purniah District, 342. Of these, 35 were classified as good, 39 as fair, 93 as moderate, 122 as indifferent, and 53 as bad.

During the year 1874-75 there were 66 houses built or made over to schools by the *samindárs* and others who took an interest in education; and there were at the end of the year 166 houses for the accommodation of the *páthsdá* boys, of which 53 are in the Headquarters Subdivision, 65 in Aráriyá, and 48 in Krishnaganj.

EDUCATIONAL CENSUS.—The following paragraphs give the results of an Educational Census carried out in two large villages in each Subdivision of the District. In one of the villages in each Subdivision a school had been for some time in existence, and the other had no such educational advantages.

Purniah Subdivision.—Belgachí, in *parganá* Purniah, which has an aided primary school. Population of the village, according to the Census of 1872—400 men, 430 women, 223 boys, 169 girls; total, 1222. Number of children of school-going age—that is, above six years and under sixteen—169 boys, 76 girls; total, 272. Number of children actually attending school—28 boys. Number of population who, without having attended school regularly, can read or write any language, or can count—44 men, 4 boys; total, 48. Number of residents in the village who can read and write Hindí—44 men, 3 boys; total, 47. Barsauná, in *parganá* Purniah, in which there is no school. Population of the village according to the Census of 1872—182 men, 218 women, 82 boys, 61 girls; total, 543. Number of children of school-going age—that is, above six years and under sixteen—106 boys, 46 girls; total, 152. Number of population who, without having attended school regularly, can read or write any language, or can count—23 men, 9 boys; total, 32

Number of residents in the village who can read and write Hindi—23 men, 9 boys; total, 32.

Ardriyá Subdivision—Basáití, in *parganá* Purniah, which has an aided primary school. Population of the village according to the Census of 1872—715 men, 761 women, 383 boys, 261 girls; total, 2120. Number of children of school-going age—246 boys, 145 girls; total, 391. Number of children actually attending any school—41 boys, 5 girls; total, 46. Number of population who, without having attended school regularly, can read or write any language, or can count—57 men, 10 boys; total, 67. Number of residents in the village who can read and write Hindi—47 men, 10 boys; total, 57. Tamgháti, in *parganá* Purniah, in which there is no school. Population of the village according to the Census of 1872—209 men, 236 women, 126 boys, 92 girls; total, 663. Number of children of school-going age—76 boys, 41 girls; total, 117. Number of children actually attending any school—5 boys. Number of population who, without having attended school regularly, can read or write any language, or can count—9 men, 2 boys; total, 11. Number of residents in the village who can read and write Hindi—3 men.

Krishnaganj Subdivision.—Khajrá, in *parganá* Surjyapur, which has an aided primary school. Population of the village according to the Census of 1872—842 men, 867 women, 397 boys, 302 girls; total, 2408. Number of children of school-going age, 163 boys, 58 girls; total, 221. Number of children actually attending any school—32 boys. Number of population who, without having attended school regularly, can read and write, or can count—68 men, 6 boys, 1 girl; total, 75. Number of residents in the village who can read and write Hindi—55 men, 1 boy; total, 56. Chakáliá, in *parganá* Badaur, in which there is no school. Population of the village according to the Census of 1872—72 men, 78 women, 52 boys, 41 girls; total, 243. Number of children of school-going age—39 boys, 14 girls; total, 53. Number of population who, without having attended school regularly, can read and write any language, or can count—12 men, 3 boys; total, 15. Number of residents in the village who can read and write Hindi—5 men.

POSTAL STATISTICS show a rapid increase in the use of the Post Office in Purniah District of late years. In 1861-62 the total revenue derived from cash collections from the public, exclusive of the account kept of revenue derived from official correspondence, amounted to £437, 12s. 11d., and the total expenditure to £866,

4s. 5½d. There is no information to show the amount of the sales of postage stamps. In 1865-66 the total postal revenue, exclusive of official correspondence, amounted to £648, 18s. 10½d., and the expenditure to £2479, 12s. 2½d. In 1870-71, exclusive of official correspondence, the revenue amounted to £3358, 6s. 9½d., and the expenditure to £6318, 14s. 1d. Within these ten years, therefore, both the revenue and the expenditure increased more than sixfold. The number of letters, etc. despatched in 1870-71 is not available. Excluding parcels, a total of 172,344 letters, newspapers, and books was received in 1870-71, against a total of 97,078 in 1861-62; showing an increase of 75,266, or 77·5 per cent., during the ten years

POSTAL STATISTICS OF PURNIAH DISTRICT FOR THE YEARS
1861-62, 1865-66, AND 1870-71.

	1861-62.		1865-66.		1870-71.		
	Received.	De-spatched.	Received.	De-spatched.	Received	De-spatched.	
Private Letters, .	73,477	77,249	91,816	93,202	<i>Materials not available.</i>	<i>Materials not available.</i>	
Official Letters, .	10,819	7,011	20,659	13,871			
Total Letters, .	84,296	84,260	112,475	107,073	157,720		
Newspapers, .	11,989	660	12,376	1,656	11,682		
Parcels,	2,118	433	1,332	500	1,504		
Books,	793	68	1,536	50	2,942		
Total,	99,196	85,421	125,719	109,279	173,848		
Total receipts, exclusive of sale of postage stamps, .	£437 12 11		£648 18 10½		£3358 3 9		
Total expenditure, .	866 4 5½		2479 12 2½		6318 14 1		

ADMINISTRATIVE DIVISIONS.—For administrative purposes, Purniah is divided into the three following Subdivisions. The population statistics are taken from the Appendix Statements 1A and 1B to the Census Report for 1872. The administrative figures are taken from a Report specially furnished by the Collector, and refer to the year 1870-71.

THE SADR OR HEADQUARTERS SUBDIVISION occupies a total area

of 2572 square miles, with 2634 villages or townships, and 157,733 houses : total population, 773,310; of whom 536,243, or 69·3 per cent., are Hindus; 235,603, or 30·5 per cent., Muhammadans; 354 Christians; and 1110, or ·2 per cent., people belonging to other denominations not classified separately. Proportion of males of all religions in the total Subdivisional population, 50·3 per cent. Average density of the population, 301 persons to the square mile, average number of villages per square mile, 1·02; average number of persons per village or township, 294; average number of houses per square mile, 61; average number of inmates per house, 4·9. The Subdivision comprises the seven police circles (*thānds*) of Purniah, Damdahá, Gondwára, Manihárá, Kadhá, Balrámpur, and Amúr Kásbá. In 1870-71 it contained 5 magisterial and revenue courts. The regular police consisted of a total number of 333 officers and men, and a rural police or village watch (*chaukidárs*) of 3236 men. The total cost of administration, police, and *chaukidárs* (village police) was estimated at £29,072, 8s. 2½d.

ARARIYA SUBDIVISION was formed on the 1st November 1864. It covers a total area of 1045 square miles, with 680 villages or townships, 67,241 houses, and a total population of 377,055 souls, of whom 267,963, or 71·1 per cent., are Hindus; 108,216, or 28·7 per cent., Muhammadans; 48 Christians; and 828, or ·2 per cent., of other denominations not specified in the Census Report. Proportion of males of all religions in the total Subdivisional population, 50·4 per cent. Average density of population, 361 persons per square mile; average number of villages or townships, ·65 per square mile; average number of persons per village or township, 554, average number of houses per square mile, 64; average number of inmates per house, 5·6. The Subdivision comprises the three police circles or *thānds* of Aráryá, Rániganj, and Matiyári. In 1870-71 there was one magisterial and revenue court; a regular police force consisting of a total number of 84 officers and men, and a rural police or village watch of 1289 *chaukidárs*. The Collector returned the total cost of administration, police, and *chaukidárs* at £6384, 11s. 1¾d.

KRISHNAGANJ SUBDIVISION was formed on the 17th December 1845. It occupies an area of 1340 square miles, with 865 villages or townships, 88,473 houses, and a total population of 564,430 souls; of whom 217,803, or 38·6 per cent., are Hindus; 346,330, or 61·4 per cent., Muhammadans; 1 is a Christian; and 296 are

of other denominations not separately classified. Proportion of males of all religions in the total Subdivisional population, 52·6 per cent. Average density of population, 421 per square mile; average number of villages per square mile, '65; average number of persons per village or township, 653; average number of houses per square mile, 66; average number of inmates per house, 6·4. The Sub-division comprises the three police circles or *thānds* of Bahádurganj, Krishnaganj, and Káliáganj. In 1870-71 it contained one magisterial and revenue court. The regular police consisted of a total number of 99 officers and men, and a village watch of 2553 *chaukidárs*. The Collector returned the total cost of administration, police, and *chaukidárs* at £11,512, 16s. 1d.

FISCAL DIVISIONS.—The following list of the Fiscal Divisions or *pargands* forming the District of Purniah is compiled from statistics published by the Board of Revenue and the returns of the Revenue Survey, corrected by comparison with the figures registered in the local Collectorate. The discrepancies amongst these authorities are comparatively few and unimportant. I believe that generally the information deduced from them regarding the acreage and number of estates is correct. The population is only approximate; it is calculated on the basis of the number of persons to the square mile in the police division within which the *pargand* is entirely, or for the most part, situated. In the case of large *pargands* contained in two or more police divisions, I have taken the average of the populations in each. The information regarding the jurisdiction of the Criminal and Civil Courts was obtained directly from the presiding officers. Where a *pargand* lies partly in one Sub-division and partly in another, I have usually mentioned the court to which the larger portion of it is subordinate. The returns obtained under Act x. of 1871, for the assessment of a cess for the maintenance of roads and communications, has supplied me with information concerning the number and size of the estates in chief, and of subordinate tenures of several degrees, and the total rental of the different classes of *rayatt* or cultivating holdings. In a previous Section on Land Tenures, I have pointed out that the assessments on which these figures are founded seem to err in falling short of the probable annual value. The Act, however, has provided that landlords will be debarred from claiming higher rates of rent than those stated to be payable to them by their tenantry in the returns filed by them under the operation of the Road Cess Act.

(1) ASJA covers an area of 81,855 acres, or 127'90 square miles; with 9 estates; land revenue, £3742; average rate of assessment, 11d. an acre; estimated population, 51,288; Magistrate's and *Munsif's* Courts at Purniah town. At the present time it may be assumed that four-fifths of the *parganā* are under cultivation. The returns under the Road Cess Act show that there is 1 estate paying revenue on a rental exceeding £5000 a year, 1 on a rental exceeding £10 a year, 7 on rentals of less than £10 a year, and 1 revenue-free estate, with a rental between £10 and £50 a year. One estate pays more than £1000 a year in revenue, and 8 pay less than £10. In this *parganā* there are—1 subordinate tenure of the first degree valued at between £500 and £1000 a year, 16 between £100 and £500, 7 between £50 and £100, 11 between £10 and £50, and 104 valued at less than £10 a year. There are 4 under-tenures of the second degree, valued at between £100 and £500 a year, 1 between £50 and £100, and 2 between £10 and £50. There are no subordinate tenures of the third or lower degrees. There are 8 *rayatī* or cultivating holdings paying more than £10 a year, and yielding a total rental of £120, 8s. od.; 69 paying rent at between £5 and £10 a year, and yielding a rental of £495, 4s. od.; 455 paying rent at between £2 and £5 a year, and yielding a rental of £1221, 4s. od.; 3086 paying rent between 10s. and £2, and yielding a rental of £3076, 10s. od.; 11,489 paying rent less than 10s. a year, and yielding a rental of £1662, 16s. od. Total rental of the *parganā*, £6576, 2s. od.

(2) BADAUR covers an area of 189,352 acres, or 295'86 square miles; with 78 estates; land revenue, £8414; average rate of assessment, 10½d. an acre; estimated population, 106,214; Magistrate's Court at the Headquarters Station, and *Munsif's* Court at Husáinganj. The returns under the Road Cess Act show that there are 2 estates paying revenue on rentals exceeding £10,000 a year, 19 on rentals exceeding £10 a year, and 28 on rentals of less than £10 a year; there are also 5 revenue-free estates with rentals between £10 and £50 a year, and 16 valued at less than £10 a year. Two estates pay more than £1000 a year in revenue, 1 pays more than £10, and 46 pay less than £10. In this *parganā* there are 2 subordinate tenures of the first degree valued at between £1000 and £5000, 2 between £500 and £1000, 29 between £100 and £500, 31 between £50 and £100, 108 between £10 and £50, and 422 valued at less than £10 a year. Of the second

degree, 4 are valued at between £100 and £500 a year, 13 at between £50 and £100, 58 at between £10 and £50, and 130 at less than £10. Of the third degree, 1 is valued at between £100 and £500, 7 are valued at between £10 and £50, and 11 at less than £10. Of the fourth degree, 1 is valued at between £10 and £50 a year, and 2 are valued at less than £10 a year. There are no subordinate tenures of the fifth or lower degrees. There are 77 *rayati* or cultivating holdings of more than £10 a year, and yielding a total rental of £1153, 16s. od.; 394 paying rent at between £5 and £10 a year, and yielding a rental of £2511, 12s. od.; 1477 paying rent at between £2 and £5 a year, and yielding a rental of £4220, 18s. od.; 6177 paying rent at between 10s. and £2 a year, and yielding a rental of £7511; and 18,516 paying less than 10s. a year, and yielding a rental of £3430, 2s. od. Total rental of the *parganá*, £18,827, 8s. od.

(3) BHAURA occupies an area of 26 acres, or 0·04 of a square mile, with 1 estate; land revenue, £1, 6s. od.; average rate of assessment, 1s. an acre; estimated population, 9; Magistrate's and *Munsif's* Courts at Husáinganj. There are no agricultural statistics for this small Fiscal Division derived from the Survey records. The proportion of cultivated land to waste may be assumed to be the same as in *parganá* Badaur—that is, in the proportion of 3 to 1. The *parganá* consists of a single estate, valued at less than £10 a year, to which there are no tenures or cultivating holdings subordinate.

(4) BURIGANGAL covers an area of 6552 acres, or 10·24 square miles; with 5 estates; land revenue, £122, 14s. od.; average rate of assessment, 4½d. an acre; estimated population, 1211; Magistrate's Court at the Headquarters Station, *Munsif's* Court at Husáinganj. The return under the Road Cess Act shows that there is 1 estate paying revenue on a rental between £100 and £500 a year, 1 on a rental between £50 and £100 a year, 2 pay on rentals between £10 and £50 a year, and 1 pays on a rental of less than £10 a year; there are no revenue-free estates. One estate pays more than £50 a year in revenue, 2 pay more than £10, and 2 less than £10. There is one subordinate tenure of the first degree valued at between £100 and £500, 1 at between £50 and £100, 2 are valued at between £10 and £50, and 11 at less than £10 a year. There are 7 subordinate tenures of the second degree valued at less than £10 a year, and no subordinate tenures of the third or lower degrees. There is one *rayati* or cultivating tenure paying

a rent of more than £10 a year, and yielding a total rental of £16, 8s. od.; 1 paying between £5 and £10, and yielding a rental of £5, 14s. od.; 4 pay between £2 and £5, and yield a rental of £10, 2s. od.; 92 pay a rent of between 10s. and £2, and yield a rental of £67, 12s. od.; and 1312 pay less than 10s. a year, and yield a rental of £220, 4s. od. Total rental of the *parganá*, £320.

(5) CHAK DILAWARI occupies an area of 24,553 acres, or 38·36 square miles; with 5 estates; land revenue, £513, 16s. od.; average rate of assessment, 5d. an acre; estimated population, 8285. Magistrate's and *Munsif's* Courts at Krishnaganj. No part of this *parganá* was measured by *khasrá*, and the Survey maps do not contain details regarding cultivated and uncultivated lands. The return under the Road Cess Act shows that there are 4 estates paying revenue on rentals exceeding £100 a year, while one pays on a rental less than £10 a year; there are no revenue-free estates in this division. Three estates pay more than £100 a year in revenue, 1 pays more than £10, and 1 less than £10 a year. There is 1 subordinate tenure of the first degree valued at between £100 and £500 a year, and 1 under-tenure of the second degree valued at between £100 and £500; there are no under-tenures of the third or lower degrees. Nine *rayatí* or cultivating holdings pay more than £10 a year, and yield a total rental of £230, 14s. od.; 8 pay between £5 and £10 a year, and yield a rental of £44, 12s. od.; 64 pay between £2 and £5, and yield a rental of £196, 6s. od.; 353 pay between 10s. and £2 a year, and yield a rental of £415, 12s. od., and 1877 pay less than 10s. a year and yield a rental of £266, 18s. od. Total rental of the *parganá*, £1154, 2s. od.

(6) DILAWARPUR covers an area of 14,233 acres, or 22·24 square miles; with 3 estates; land revenue, £693, 6s. od.; average rate of assessment, 11½d. an acre; estimated population, 4803; Magistrate's and *Munsif's* Courts at Husáinganj. No measurement was made by *khasrá* in this *parganá*. The return under the Road Cess Act shows 1 estate paying revenue on a rental exceeding £10 a year, and 1 estate paying more than £10 in revenue. There is 1 subordinate tenure of the first degree valued at between £10 and £50 a year, and 2 are valued at less than £10 a year. One *rayatí* or cultivating tenure pays between £2 and £5 a year, and yields a rental of £2, 18s. od.; 22 pay rent between 10s. and £2 a year, and yield a total rental of £24, 4s. od.; and 14 pay less than 10s. a

year, and yield a rental of £4, 2s. od. Total rental of the *pargand*, £31, 4s. od.

(7) DHARMPUR covers an area of 756,535 acres, or 1182·06 square miles; with 453 estates; land revenue, £23,143, 2s. od.; average rate of assessment, 7½d. an acre; estimated population, 265,963; Magistrate's and *Munsif's* Courts at the Headquarters Station and at Aráriyá. The returns under the Road Cess Act show that there is 1 estate paying revenue on a rental of £10,000 a year, 2 pay on rentals exceeding £5000 a year, 6 on rentals exceeding £100 a year, 6 on rentals exceeding £50 a year, 128 on rentals exceeding £10 a year, and 291 on rentals of less than £10 a year. There is 1 revenue-free estate with a rental between £50 and £100 a year, 7 have rentals between £10 and £50 a year, and 44 have less than £10 a year; 5 estates pay revenue or rent directly to the Collector, valued at less than £10 a year, and 5 estates, of which the land revenue has been redeemed, are valued at less than £10 a year. One estate pays more than £10,000 a year in revenue, 1 more than £1000, 3 more than £100, 2 more than £50, 34 more than £10; 393 pay less than £10 a year, and 5 under £10 a year pay direct to the Collector. In this *pargand* there are—2 subordinate tenures of the first degree valued at between £1000 and £5000 a year, 1 at between £500 and £1000, 63 at between £100 and £500, 55 at between £50 and 100, 113 at between £10 and £50, and 2808 at less than £10 a year. There are 13 under-tenures of the second degree valued at between £100 and £500 a year, 7 at between £50 and £100, 11 at between £10 and £50, and 16 at less than £10 a year. There are 57 *rayatt* or cultivating holdings paying more than £10 a year, and yielding a total rental of £1007, 18s. od.; 177 pay between £5 and £10 a year, and yield a rental of £1121, 12s. od.; 1410 pay rent at between £2 and £5, and yield a rental of £4011, 2s. od.; 9695 pay between 10s. and £2 rent, and yield a rental of £9059, 2s. od.; and 30,947 pay less than 10s. a year, and yield a rental of £5239, 2s. od. Total rental of the *pargand*, £20,438, 16s. od.

(8) FATHIPUR SINGHIA covers an area of 149,703 acres, or 233·91 square miles; with 206 estates; land revenue, £4101, 6s. od.; average rate of assessment, 6½d. an acre; estimated population, 101,283; Magistrate's and *Munsif's* Courts at Aráriyá and Krishnaganj. The Road Cess Act returns show that there are 2 estates paying revenue on rentals exceeding £1000 a year. 10 on rentals

exceeding £100, 17 on rentals exceeding £50, 105 on rentals exceeding £10, and 73 on rentals of less than £10 a year. There is 1 revenue-free estate with a rental of between £100 and £500 a year; of 1, the rental is between £50 and £100 a year; of 4, between £10 and £50 a year; and of 3 it is less than £10 a year. One estate pays revenue or rent directly to the Collector, valued at less than £10 a year. Two estates pay more than £1000 a year in revenue, 1 pays more than £100, 4 more than £50, 37 more than £10, and 163 less than £10 a year; 1 estate pays revenue directly to the Collector, valued at less than £10 a year. There is 1 subordinate tenure of the first degree valued at between £500 and £1000 a year, 18 are valued between £100 and £500, 5 at between £50 and £100, 67 at between £10 and £50, and 163 at less than £10 a year. There is 1 subordinate tenure of the second degree valued at between £100 and £500 a year, 18 are valued at between £10 and £50, and 34 at less than £10 a year. There are 291 *rayati* or cultivating holdings paying more than £10 a year, and yielding a total rental of £6117; 333 paying between £5 and £10, and yielding a rental of £2151, 16s. od.; 1041 paying between £2 and £5, and yielding a rental of £2591, 10s. od.; 1437 paying between 10s. and £2, and yielding a rental of £1751, 2s. od.; and 1013 paying less than 10s. a year, and yielding a rental of £215, 14s. od. Total rental of the *parganá*, £12,827, 2s. od.

(9) GARARI covers an area of 66,491 acres, or 103.89 square miles; with 26 estates; land revenue, £1426, 4s. 1½d.; average rate of assessment, 5½d. an acre; estimated population, 44,049; Magistrate's and *Munsif's* Courts at the Headquarters Station and at Aráriyá. The valuation returns obtained under the Road Cess Act are given under *parganá* Dharmpur.

(10) GARHI occupies an area of 28,804 acres, or 45.01 square miles; with 4 estates; land revenue, £210; average rate of assessment, 1¾d. an acre; estimated population, 10,522, Magistrate's Court at the Headquarters Station, and *Munsif's* Court at Husáinganj. The returns under the Road Cess Act show—1 estate paying revenue on a rental exceeding £500 a year, 1 on a rental exceeding £10 a year, and 2 on rentals less than £10 a year. One estate pays more than £100 a year in revenue, and 3 pay less than £10 a year. There are 2 subordinate tenures of the first degree valued at between £100 and £500 a year, and 2 at less than £10 a year.

There are 3 *rayati* or cultivating holdings paying rent between £5 and £10 a year, and yielding a total rental of £19, 2s. od.; 13 paying rent between £2 and £5, and yielding a rental of £35, 8s. od.; 156 paying rent between 10s. and £2, and yielding a rental of £151, 2s. od.; and 5330 paying rent of less than 10s., and yielding a rental of £289, 4s. od. Total rental of this *parganá*, £494, 16s. od.

(11) HATANDA covers an area of 55,541 acres, or 86·78 square miles; with 12 estates; land revenue, £4005, 18s. od.; average rate of assessment, 1s. 5½d. an acre; estimated population, 26,207; Magistrate's Court at the Headquarters Station, *Munsif's* Court at Husdinganj. The returns under the Road Cess Act show that there are 2 estates paying revenue on a rental exceeding £100 a year, 5 on a rental valued at less than £10 a year, and 2 revenue-free estates paying rentals between £10 and £50 a year. Seven estates pay less than £10 a year in revenue. No under-tenures exist in this division. Of the *rayati* or cultivating holdings, 4 pay more than £10 a year, and yield a total rental of £68, 10s. od.; 5 pay between £5 and £10, and yield a rental of £35, 8s. od.; 61 pay between £2 and £5, and yield a rental of £174, 18s. od.; 298 pay between 10s. and £2, and yield a rental of £294, 18s. od.; and 282 pay less than 10s. a year, and yield a rental of £64, 18s. od. Total rental of the *parganá*, £638, 12s. od.

(12) HAVELI PURNIAH covers an area of 498,436 acres, or 778·81 square miles; with 150 estates; land revenue, £15,355, 2s. od.; average rate of assessment, 7½d. an acre; estimated population, 330,215; Magistrate's, Judge's, and *Munsif's* Courts at the Headquarters Station. The Road Cess Act returns show that 1 estate pays revenue on a rental exceeding £10,000, 1 on a rental exceeding £500, 2 on rentals exceeding £100, 7 on rentals of more than £50, 48 on rentals of over £10, and 94 on rentals of less than £10 a year. There is 1 revenue-free estate with a rental of between £100 and £500 a year, 9 with rentals of £10 to £50, and 6 with rentals of less than £10 a year. There is also 1 estate paying revenue directly to the Collector, valued at between £50 and £100 a year. One estate pays more than £10,000 a year in revenue, 2 pay more than £100, 1 pays more than £50, 17 pay more than £10, and 132 less than £10 a year; while 1 estate, valued at between £10 and £50 a year, pays revenue directly to the Collector. There are 5 subordinate tenures of the first degree valued at between £1000 and £5000 a year, 18 at between £500

and £1000, 111 at between £100 and £500, 36 at between £50 and £100, 100 at between £10 and £50, and 2313 at less than £10 a year. There is 1 subordinate tenure of the second degree valued at between £1000 and £5000 a year, 2 are valued at between £500 and £1000, 42 at between £100 and £500, 28 at between £50 and £100, 64 at between £10 and £50, and 59 at less than £10 a year. Of the third degree there are 5 subordinate tenures valued at between £100 and £500 a year, 7 at between £50 and £100 a year, 16 at between £10 and £50 a year, and 10 at less than £10 a year. There are 447 *rayati* or cultivating tenures paying more than £10 a year, and yielding a total rental of £8918, 16s. od.; 817 paying between £5 and £10, and yielding a rental of £5473; 3393 paying between £2 and £5, and yielding a rental of £7944, 16s. od.; 13,613 paying between 10s. and £2, and yielding a rental of £17,920, 8s. od.; and 49,800 paying less than 10s. a year, and yielding a rental of £13,128, 2s. od. Total rental of the *parganá*, £53,385, 2s. od.

(13) KADBA covers an area of 87,848 acres, or 137.26 square miles; with 13 estates; land revenue, £2714, 14s. od.; average rate of assessment, 7½d. an acre; estimated population, 50,100; Magistrate's Court at the Headquarters Station, and *Munsifs* Court at Husáinganj. The returns under the Road Cess Act show that there are 2 estates paying revenue on rentals exceeding £1000 a year, 4 on rentals exceeding £10 a year, and 4 on rentals valued at less than £10 a year. There is 1 revenue free estate with a rental of between £10 and £50 a year, and 1 paying revenue directly to the Collector on a rental valued at between £10 and £50 a year. Two estates pay more than £1000 a year in revenue, and 8 pay less than £10 a year; 1 pays direct to Collector more than £10 in revenue. There is 1 under-tenure of the first degree valued at between £1000 and £5000 a year, 16 are valued at between £100 and £500 a year, 7 are valued at between £50 and £100, 8 at between £10 and £50, and 192 at less than £10 a year. Of the second degree there are 7 sub-tenures, valued at between £100 and £500 a year, 9 valued at between £50 and £100, 17 between £10 and £50, 6 valued at less than £10 a year. Of the *rayati* or cultivating holdings, 4 pay more than £10 a year, and yield a total rental of £49, 18s. od.; 25 pay between £5 and £10, and yield a rental of £159, 16s. od.; 235 pay between £2 and £5, and yield a rental of £714, 6s. od.; 2918 pay between 10s. and

£2, and yield a rental of £2739, 8s. od. ; and 8636 pay less than 10s. a year, and yield a rental of £1873, 10s. od. Total rental of the *parganá*, £5536, 18s. od.

(14) KANKJOL covers an area of 194,324 acres, or 303·64 square miles ; with 23 estates ; land revenue, £3875, 2s. od. ; average rate of assessment, 4½d. an acre ; estimated population, 72,873 ; Magistrate's Court at the Headquarters Station, Honorary Magistrate's Court at Mansháí, and *Munsif's* Court at Husáinganj. According to the Road Cess returns, there are 2 estates paying revenue on rentals exceeding £1000 a year, 1 pays on a rental exceeding £500 a year, 3 pay on rentals exceeding £100, 2 on rentals exceeding £10, and 16 on rentals of less than £10 a year. One estate pays more than £1000 a year in revenue, 1 pays more than £500, 3 pay more than £100, 1 pays more than £50 a year, and 18 pay less than £10 a year in revenue. Of the under-tenures of the first degree, there are 3 valued at between £500 and £1000 a year, 9 at between £100 and £500, 4 valued at between £50 and £100, 17 valued at between £10 and £50, and 125 valued at less than £10 a year. Of the second degree, there are 2 valued at between £100 and £500 a year, 3 valued at between £50 and £100, 7 valued at between £10 and £50, and 48 valued at less than £10 a year. Of the third degree, there is 1 valued at between £50 and £100 a year, while 4 are valued at between £10 and £50 a year. There are no under-tenures of any lower degrees. Of the *rayatí* or cultivating holdings, 17 pay more than £10 a year, and yield a total rental of £365, 8s. od. a year ; 35 pay between £5 and £10 a year, and yield a rental of £227, 6s. od. ; 221 pay between £2 and £5, and yield a rental of £703, 8s. od. ; 2756 pay between 10s. and £2, and yield a rental of £2562, 16s. od. ; and 18,138 pay less than 10s. a year, yielding a rental of £2441, 8s. od. Total rental of the *parganá*, £6300, 6s. od.

(15) KASIMPUR contains an area of 5278 acres, or 8·25 square miles ; with 7 estates ; land revenue, £149, 4s. od. ; average rate of assessment, 6¾d. an acre ; estimated population, 2318 ; Magistrate's Court at the Headquarters Station, and *Munsif's* Court at Husáinganj. The Road Cess Report shows that there was 1 estate paying revenue on a rental exceeding £10 a year, and 1 estate paying less than £10 in revenue per annum. No under-tenures or *rayatí* holdings exist in this *parganá*.

(16) KATIYAR covers an area of 66,464 acres, or 103·85 square

miles ; with 9 estates ; land revenue, £1105, 2s. od. ; average rate of assessment, 4d. an acre ; estimated population, 37,905 ; Magistrate's Court at the Headquarters Station, and *Munsif's* Court at Husáinganj. The Road Cess Act returns show that there are 2 estates paying revenue on rentals exceeding £1000 a year, 1 on a rental exceeding £10 a year, 8 on rentals of less than £10 a year, and 1 revenue-free estate with a rental less than £10 a year. Two estates pay more than £500 in revenue, and 9 pay less than £10. There are 4 under-tenures of the first degree valued at between £100 and £500 a year, 8 valued at between £10 and £50, and 83 valued at less than £10 a year. There is one under-tenure of the second degree valued at between £100 and £500 a year, 3 are valued at between £10 and £50, and 1 at less than £10 a year. Of the *rayati* or cultivating holdings, 21 pay more than £10 a year, and yield a total rental of £340, 16s. od. ; 44 pay between £5 and £10 a year, and yield a rental of £300 ; 202 pay between £2 and £5, and yield a rental of £489, 18s. od. ; 995 pay between 10s. and £2, and yield a rental of £914, 14s. od. ; and 13,785 pay less than 10s. a year, and yield a rental of £634. Total rental of the *pargand*, £2679, 8s. od.

(17) KHOLRA covers an area of 5511 acres, or 8·61 square miles ; with 1 estate ; land revenue, £343 ; average rate of assessment, 1s. 3d. an acre ; estimated population, 2066 ; Magistrate's Court at the Headquarters Station, *Munsif's* Court at Husáinganj. The report under the Road Cess Act shows that 1 estate pays revenue on a rental exceeding £500, and 1 on a rental of more than £100 per annum in revenue. There are 10 under-tenures of the first degree valued at less than £10 a year. There are 6 *rayati* or cultivating tenures paying more than £10 a year in rent, and yielding a total rental of £104, 2s. od. ; 16 paying between £5 and £10, and yielding a rental of £94, 12s. od. ; 57 paying between £2 and £5, and yielding a rental of £253, 12s. od. ; 252 paying between 10s. and £2, and yielding a rental of £207, 8s. od. ; 138 paying less than 10s., and yielding a rental of £37, 4s. od. Total rental of the *pargand*, £696, 18s. od.

(18) KUMARIPUR occupies an area of 42,395 acres, or 66·24 square miles ; with 16 estates ; land revenue, £610, 18s. od. ; average rate of assessment, 3½d. an acre ; estimated population, 15,797 ; Magistrate's Court at the Headquarters Station, and *Munsif's* Court at Husáinganj. The Road Cess returns show that there are 2 estates

paying revenue on rentals exceeding £500 a year, 2 on rentals exceeding £100 a year, and 16 on rentals of less than £10 a year. There are five revenue-free estates with rentals of less than £10 a year. Two estates pay more than £100 a year in revenue, 2 pay more than £10, and 16 less than £10 a year. There are 2 subordinate tenures of the first degree, valued at between £100 and £500 a year, 4 between £50 and £100, 2 between £10 and £50, and 44 valued at less than £10 a year. Of the second degree there is one subordinate tenure, valued at between £10 and £50 a year. There are 4 *rayati* or cultivating holdings paying more than £10 a year, and yielding a total rental of £60, 10s. od.; 13 paying between £5 and £10 a year, and yielding a rental of £88, 16s. od.; 67 paying between £2 and £5, and yielding a rental of £216, 4s. od.; 685 paying between 10s. and £2, and yielding a rental of £607, 8s. od.; and 4359 paying less than 10s. a year, and yielding a rental of £731, 14s. od. Total rental of the *pargand*, £1704, 12s. od.

(19) LAKHPURA *tappá* covers an area of 3311 acres, or 5·17 square miles; with 8 estates; land revenue, £88, os. 7d.; average rate of assessment, 6½d. an acre; estimated population, 1116; Magistrate's Court at the Headquarters Station, and *Munsif's* Court at Husáinganj. This *tappá* is really a part of Burigangal *pargand*, but was separately measured at the time of Survey, and now bears a separate number on the *tauji* or revenue roll.

(20) MAHINAGAR covers an area of 15,376 acres, or 24·02 square miles; with 5 estates; land revenue, £549; average rate of assessment, 7½d. an acre; estimated population, 7254; Magistrate's Court at the Headquarters Station, and *Munsif's* Court at Husáinganj.

(21) MALDAWAR occupies an area of 13,313 acres, or 20·80 square miles; with 2 estates; land revenue, £656, 4s. od.; average rate of assessment, 11½d. an acre; estimated population, 6718; Magistrate's Court at the Headquarters Station, and *Munsif's* Court at Husáinganj. The returns under the Road Cess Act show that 1 estate pays revenue on a rental exceeding £1000 a year, and 1 on a rental of less than £10 a year; 1 estate pays more than £500 in revenue, and 1 estate pays less than £10. There is 1 under-tenure of the first grade valued at between £1000 and £5000 a year, and there are 31 valued at less than £10. There are 4 under-tenures of the second grade valued at between £100 and £500 a year,

5 valued at between £50 and £100 a year, 3 valued at between £10 and £50 a year, and 6 valued at less than £10 a year. Of the third degree there is 1 under-tenure, valued at between £10 and £50 a year. Eight *rayati* or cultivating tenures pay rent at between £2 and £5 a year, and yield a total rental of £25, 6s. od.; 34 pay at between 10s. and £2, and yield a rental of £38, 8s. od.; and 92 pay less than 10s. a year, and yield a rental of £22, 18s. od. Total rental of the *parganá*, £86, 12s. od.

(22) PAWAKHALI covers an area of 81,264 acres, or 126·97 square miles; with 48 estates; land revenue, £1767, os. 3d.; average rate of assessment, 5½d. an acre; estimated population, 79,483; Magistrate's and *Munsif's* Courts at Krishnaganj. The returns under the Road Cess Act show that 1 estate pays revenue on a rental exceeding £5000 a year, 5 pay on rentals exceeding £50, 31 on rentals exceeding £10, and 11 on rentals valued at less than £10 a year. There is 1 revenue-free estate with a rental of between £10 and £50 a year. One estate pays more than £1000 a year in revenue, 9 pay more than £10, and 38 less than £10 a year. Three subordinate tenures of the first degree are valued at between £1000 and £5000 a year, 1 is valued at between £100 and £500 a year, 2 are valued at between £50 and £100, 93 at between £10 and £50, and 224 at less than £10 a year. There is 1 subordinate tenure of the second degree valued at between £1000 and £5000 a year, 1 valued at between £100 and £500, 3 valued at between £50 and £100, 103 valued at between £10 and £50, and 123 valued at less than £10 a year. There are 210 *rayati* or cultivating holdings paying more than £10 a year, and yielding a total rental of £3621, 16s. od.; 353 paying between £5 and £10 a year, and yielding a rental of £2469, 6s. od.; 494 paying between £2 and £5, and yielding a rental of £1753, 14s. od.; 703 paying between 10s. and £2, and yielding a rental of £848; and 310 paying less than 10 a year, and yielding a rental of £59, 12s. od. Total rental of the *parganá*, £8752, 8s. od.

(23) SHAHPUR covers an area of 2350 acres, or 3·67 square miles; with 1 estate; land revenue, £103; average rate of assessment, 10½d. an acre; estimated population, 1556; Magistrate's and *Munsif's* Courts at Husáinganj. The Road Cess returns show 1 estate paying revenue on a rental exceeding £100, and 1 estate paying more than £100 in revenue; 1 under-tenure of the first degree valued at between £100 and £500 a year, and 5 valued at less

than £10 a year ; 1 cultivating holding paying more than £10, and yielding a rental of £18, 8s. od. ; 3 paying between £5 and £10, and yielding a rental of £23, 10s. od. ; 3 paying between £2 and £5, and paying a rental of £9 ; 103 paying between 10s. and £2, and yielding a rental of £92, 6s. od. ; and 591 paying less than 10s., and yielding a rental of £85, 8s. od.

(24) SULTANPUR covers an area of 194,017 acres, or 303·15 square miles ; with 118 estates ; land revenue, £6198, 14s. od. ; average rate of assessment, 7½d. an acre ; estimated population, 108,527 ; Magistrate's and *Munsif's* Courts at Husáinganj and Basantpur. The Road Cess returns show that 1 estate pays revenue on a rental exceeding £100 a year, 2 pay on rentals exceeding £50 a year, 36 pay on rentals exceeding £10 a year, and 80 pay on less than £10 a year. There are 2 revenue-free estates with rentals of between £100 and £500 a year, 2 with rentals of between £50 and £100, and 9 with rentals of between £10 and £50 ; 1 pays direct to the Collector on a rental valued at less than £10 a year. One estate pays more than £50 a year in revenue, 6 pay more and 112 less than £10 a year, and 1 pays less than £10 a year in revenue direct to the Collector. There is 1 under-tenure of the first degree valued at between £50 and £100 a year, 2 are valued at between £10 and £50 a year, and 1 is valued at less than £10 a year. There are 3 *rayati* or cultivating tenures paying more than £10 a year, and yielding a total rental of £38, 12s. od. ; 9 paying between £5 and £10, and yielding a rental of £56, 18s. od. ; 108 paying between £2 and £5, and yielding a rental of £294, 10s. od. ; 589 paying between 10s. and £2, and yielding a rental of £500, 14s. od. ; and 1047 paying less than 10s. a year, and yielding a rental of £219, 16s. od. Total rental of the *parganá*, £1110, 10s. od.

(25) SRIPUR covers an area of 231,744 acres, or 362·10 square miles ; with 336 estates ; land revenue, £12,484, 10s. od. ; average rate of assessment, 1s. 0¾d. an acre ; estimated population, 129,731 ; Magistrate's and *Munsif's* Courts at Krishnaganj and Aráriyá. The returns under the Road Cess Act show 2 estates paying revenue on rentals exceeding £5000 a year, 4 paying on rentals exceeding £100, 14 paying on rentals exceeding £50, 234 on rentals exceeding £10, and 95 on rentals of less than £10 a year ; 1 revenue-free estate with a rental between £50 and £100 a year, 31 with rentals of between £10 and £50, and 30 with

rentals of less than £10 a year. Two estates pay more than £1000 a year in revenue, 2 pay more than £50, 37 pay more and 308 less than £10 a year in revenue. Three subordinate tenures of the first degree are valued at between £500 and £1000 a year, 21 at between £100 and £500, 18 at between £50 and £100, 72 at between £10 and £50, and 369 at less than £10 a year. There are 2 subordinate tenures of the second degree valued at between £100 and £500 a year, 5 valued at between £50 and £100, 61 at between £10 and £50, and 38 at less than £10 a year. There are 75 *rayati* or cultivating tenures paying more than £10 a year, and yielding a total rental of £1169, 10s. od.; 372 paying between £5 and £10, and yielding a rental of £2482, 8s. od.; 1385 paying between £2 and £5, and yielding a rental of £4187, 14s. od.; 3027 paying between 10s. and £2, and yielding a rental of £3094, 14s. od.; and 1944 paying less than 10s. a year, and yielding a rental of £471, 6s. od. Total rental of the *parganá*, £11,405, 12s. od.

(26) SURJYAPUR covers an area of 467,190 acres, or 729.99 square miles; with 110 estates; land revenue, £24,589, 6s. od.; average rate of assessment, 1s. 0½d. an acre; estimated population, 345,285; Magistrate's and *Munsif's* Courts at Krishnaganj. According to the returns submitted under the Road Cess Act, there is 1 estate paying revenue on a rental exceeding £10,000 a year, 1 on a rental exceeding £500, 1 on a rental exceeding £100, 8 on rentals exceeding £50, 74 on rentals exceeding £10, and 22 on rentals of less than £10 a year. There is 1 revenue-free estate with a rental of between £500 and £1000 a year, 1 with a rental of between £50 and £100 a year, and 5 with rentals of between £10 and £50 a year. One estate pays more than £10,000 a year in revenue, 2 pay more than £50, 27 pay more and 77 less than £10 a year in revenue. There are 6 under-tenures of the first degree valued at between £1000 and £5000 a year, 22 valued at between £500 and £1000, 30 between £100 and 500, 73 between £50 and £100, 350 between £10 and £50, and 1174 valued at less than £10 a year. There is 1 under-tenure of the second degree valued at between £1000 and £5000 a year, 2 valued at between £500 and £1000, 15 valued at between £100 and £500, 16 valued at between £50 and £100, 172 at between £10 and £50, and 39 valued at less than £10 a year. There are 1198 cultivating or *rayati* holdings paying more than £10 a year, and yielding a total rental of £24,935, 14s. od.; 1934 paying

between £5 and £10, and yielding a rental of £14,693, 10s. od. ; 3780 paying between £2 and £5, and yielding a rental of £13,764, 2s. od. ; 7685 paying between 10s. and £2, and yielding a rental of £10,642, 2s. od. ; and 8341 paying less than 10s. a year, and yielding a rental of £2502, 4s. od. Total rental of the *pargand*, £66,537, 12s. od.

(27) TAJPUR covers an area of 115,338 acres, or 180·21 square miles ; with 44 estates ; land revenue, £6004, 16s. od. ; average rate of assessment, 1s. 0½d. an acre ; estimated population, 58,207 ; Magistrate's Court at the Headquarters Station, and *Munsif's* Courts at Husáinganj and the Headquarters Station. The returns under the Road Cess Act show 1 estate paying revenue on a rental exceeding £5000 a year, 1 on a rental exceeding £1000, 2 on rentals exceeding £100, 1 on a rental exceeding £50, 9 on rentals exceeding £10, 18 on rentals of less than £10 a year, and 1 revenue-free estate with a rental between £10 and £50 a year. Two estates pay more than £1000 a year in revenue, 1 pays more than £100, 1 pays more than £10, and 28 pay less than £10 a year in revenue. There are 3 under-tenures of the first degree valued at between £1000 and £5000 a year, 1 valued at between £500 and £1000, 15 at between £100 and £500, 24 at between £50 and 100, 40 at between £10 and £50, and 302 at less than £10 a year. Of the second degree there are 13 under-tenures valued at between £100 and £500 a year, 49 at between £50 and £100, 5 at between £10 and £50, and 91 at less than £10 a year. There are 27 *rayati* or cultivating holdings paying more than £10 a year, and yielding a total rental of £619, 18s. od. ; 53 paying between £5 and £10, and yielding a rental of £361, 8s. od. ; 745 paying between £2 and £5, and yielding a rental of £2147, 18s. od. ; 2359 paying between 10s. and £2, and yielding a rental of £1811, 12s. od. ; and 10,650 paying less than 10s. a year, and yielding a rental of £2053, 8s. od. Total rental of the *pargand*, £6994, 4s. od.

(28) TERAKHARDA covers an area of 48,136 acres, or 75·21 square miles ; with 11 estates ; land revenue, £1511, 2s. od. ; average rate of assessment, 7½d. an acre ; estimated population, 26,849 ; Magistrate's and *Munsif's* Courts at Aráriyá. The Road Cess returns show 1 estate paying revenue on a rental exceeding £5000 a year, 2 paying on rentals exceeding £500, 3 on rentals exceeding £10, 4 on rentals of less than £10 a year, and 1 revenue-free estate with a rental of between £10 and £50 a year. One estate pays

more than £1000 a year in revenue, and 2 pay more and 7 pay less than £10 a year in revenue. There is 1 under-tenure of the first degree valued at between £500 and £1000 a year, 11 are valued at between £100 and £500, 11 at between £50 and £100, 1 at between £10 and £50, and 55 at less than £10 a year; there is also 1 under-tenure of the second degree valued at between £500 and £1000 a year. There is 1 *rayati* or cultivating tenure paying more than £10 a year, and yielding a total rental of £14, 2s. od.; 11 pay between £5 and £10, and yield a rental of £66, 10s. od.; 197 pay between £2 and £5, and yield a rental of £653, 18s. od.; 3134 pay between 10s. and £2, and yield a rental of £2676, 4s. od.; and 9911 pay less than 10s. a year, yielding a rental of £2077, 2s. od. Total rental of the *pargana*, £5487, 16s. od.

THE CLIMATE of Purniah District is intermediate between that of Behar and that of Central Bengal. The rainfall, though markedly heavier than that registered in the trans-Gangetic tracts of Behar, such as Tirhut and North Bhágalpur, is not nearly so heavy as that of such Districts as Dinájpur, Rangpur, and Bográ. Within the District itself, the fall of rain is heavier on the alluvial tracts to the east than on the sandy land near the Kúsi. Purniah is the most eastern District that distinctly feels the dry and hot west winds so prevalent in Upper India and Behar; but these last only for a short time, and are frequently interrupted by moisture-laden breezes from the east, which, if prolonged during the spring months, are a sure forerunner of epidemic outbreaks.

The year may be roughly divided into three seasons,—cold, hot, and rainy. The cold weather commences in the end of October and continues till the beginning of April, thus lasting nearly a month longer than in most parts of Behar, and commencing somewhat earlier than in the lower deltaic Districts. The hot season, which is milder than that of either Behar or the sea-coast Districts, lasts till the middle of June. These two seasons are for Europeans as pleasant as anything they can meet with in the Lower Provinces; but they are succeeded by a season of damp and unhealthiness, which has given Purniah a very unfavourable reputation. July and August are months of heavy rain, but they are cool and averagely healthy. In September the rainfall is nearly as heavy as in the two previous months, the atmosphere becomes surcharged with moisture, and a general feverishness prevails. Towards the end of the month, and during October, when there is little rain, the

flooded lands begin to dry up, and the air is full of malarial exhalations from decaying vegetation. At this season three-fourths of the native population suffer from fever, which they do not get rid of till nearly the close of the year. At the present time, at least, Europeans living in dry and well-ventilated houses ordinarily escape this disease, or suffer from it for only a very short time; and the cold of the following winter braces them up and prepares them for another hot and rainy season.

METEOROLOGY.—The following tables (pp. 433 and 434) show the maximum and minimum ranges of the thermometer during the years 1871 to 1875, the wind directions for the same years, and the rainfall at the Headquarters Station, month by month, from 1867 to 1875.

THE ENDEMIC DISEASES of Purniah District are principally those scientifically classed as zymotic. Chief amongst these are fevers, intermittent and remittent, with their train of sequelæ, spleen disease, hepatitis, diarrhœa, dysentery, dropsy, and cancrum oris. Persons of all ages and both sexes suffer very much from fever, which, in almost every case, is of malarial origin. Children, from the very earliest period of infancy, and, indeed, at the breast, are subject to remittent fever; and in such instances rarely live to the time of the second dentition, and often die long before, from sloughing of the cheeks and gums. The few who survive and struggle on to the age of puberty have sometimes been known to entirely recover their health, the development of the natural powers about that period producing, especially in the case of females, a most remarkable effect. The causes of fever are not a matter of doubt in Purniah. The country is everywhere low and interspersed with shallow swamps and stagnant rivers, and to a new-comer the odour of miasmatic atmosphere is readily perceptible. It is uncertain whether fever is more or less prevalent in wet years, as there is evidence to show that in years of markedly deficient rainfall, such as 1875, the fever mortality has been abnormally high. Deaths in 1871 and 1874, both years of excessive rain, were about as numerous, but not more so than in ordinary years. The Civil Surgeon, Dr. Picachy, seems to think that bowel complaints are more often the result of the weakening action of fever on the constitution, than original complaints. In the hot weather, however, and during the period when the rice seedlings are being planted out, when the labourers have to remain all day up to the knees in water, diarrhœa and dysentery appear

[Sentence continued on page 435.]

TABLE SHOWING THERMOMETRICAL READINGS AND GENERAL WIND DIRECTIONS REGISTERED IN PURNIAH DISTRICT, FOR THE FIVE YEARS 1871 TO 1875.

DISTRICT, FOR THE YEAR 1875.

	Thermometrical Readings.										Wind Directions.				
	1871.		1872.		1873.		1874.		1875.		1871.	1872.	1873.	1874.	1875.
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min					
January.	77	46	74	45	74	45	75	62	72	44	W	W.	W.	W.	W.
February.	84	53	81	48	87	49	83	47	83	44	W	W.	W	W	W.
March.	93	52	93	54	94	55	91	51	95	55	W	W.	W.	W.	N.E.
April.	96	65	104	55	100	65	102	63	100	58	N.E.	W		E.	E.
May.	103	67	103	70	105	68	107	50	102	67	E	N.E.	W	E.	E.
June.	98	75	100	72	105	70	98	48	105	57	E.	E.	N.E.	E.	E.
July.	94	75	96	74	98	76	99	50	102	52	E	E	E	E	E.
August.	98	75	94	75	96	75	95	50	92	55	E	E.	W	E.	E.
September.	96	72	94	70	95	74	95	54	95	73	E	E	N.E.	N.E.	E.
October.	91	59	92	63	93	61	97	62	92	65	E	W.	W.	E	W.
November.	85	55	80	55	87	52	96	43	85	53	W.	N.E.	W.	W.	W.
December.	80	49	78	47	79	44	85	41	79	47	W.	W.	W	W.	W.

STATEMENT OF THE RAINFALL REGISTERED IN PURNIAH DISTRICT, MONTH BY MONTH, DURING THE
NINE YEARS 1867 TO 1875.

	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	Averages.
January,	1'50	...	...	...	..	1'20	0'37	0 14	0 68	0 42
February,	2'75	3'00	0'20	..	0'37	0'64	.	1 59	..	0 95
March,	3'00	0'90	...	...	0 41	..	0 82	..	..	0 57
April,	3'50	0'80	0'80	5 10	3'77	..	2 66	3 05	0'51	2'25
May,	1 25	2'90	5'50	2'00	3'10	1 98	0 44	0'97	4'71	3 76
June,	38'25	7'20	19'40	11 80	14 26	14'29	6 34	13 80	8'95	14'92
July,	31'90	17'70	9 80	12 80	13'77	17'19	10 98	17'83	9'31	15'70
August,	10'10	26 40	6'90	12'80	24 13	7'76	10 60	11 20	14 95	13'87
September,	8'00	12'60	6'60	1'80	18'20	10'89	6 75	17 91	5 09	9 76
October,	4'20	..	0'90	8 70	0'20	5 46	...	7'32	..	2 97
November,	0'20	..	..	...	...	..	...	...	..	0'02
December, . . . . .	..	..	...	.	...	...	0'37	.	...	0'04
Total for the year,	115'65	71'50	50'10	55'00	78 21	59'41	39'23	73 81	44'20	65'23

Sentence continued from page 432.]

without fever. In the summer months they are often caused by unripe fruit, and frequently prepare the way for outbreaks of cholera.

Bronchocele, or goitre, is very prevalent in some parts of the District, and presents itself under the most dissimilar conditions. The two areas in which it is most met with lie, one due west of the Headquarters Station along the bank of the Kúsi, and the other to the south-west, in the direction of Kadba and Manihári. Most of the former tract is an open high country, with very few marshes or stagnant pools, and a soil essentially sandy. The latter is a low, damp, inundated country, with an excess of vegetation and swamp, and a soil of the heaviest clay. The points in which they coincide are, that they are about equally well cultivated, and have a population of Hindus and Musalmáns mixed in about the same proportion, who have very similar habits of life. The drinking water in both tracts is obtained chiefly from wells, but partly also from dammed-up branches of streams which have their origin in the Lower Himálayas. It does not appear, however, what is the nature of the strata to which the wells reach, and from which water is derived; and there is reason to believe that calcareous beds underlie both the clay of the south-east and the sand of the west. The disease does not seem to have undergone any abatement from increased cultivation; and medical treatment has not been successful, relapses usually succeeding the disuse of medicine. The enlargements of the throat are of every description,—small and excessively large, soft and indurated, smooth and nodulate. They are also occasionally partial, only a single lobe of the thyroid gland being enlarged. They sometimes attain such a size as to interfere with respiration, in a few cases even to such an extent as to cause suffocation. This disease often gives rise to a strange reverberation in the throat like subdued roaring, so that the approach of a person suffering from it may be perceived at some distance. Females suffer most from this disease; nor is it confined to the human subject. In the village of Barrora, inhabited mostly by Muhamma-ians, who all are more or less affected by it, dogs (even young puppies), horses, and fowls often have thyroid swellings.

Leprosy can scarcely be said to be endemic, and does not exist among the people to any great extent. The cases are scattered, and not confined to any particular locality,—the subjects being chiefly beggars, mostly males and unmarried. A male leper is sometimes

to be seen accompanied by a healthy-looking woman ; and in this way, although all hereditary tendency to the disease is denied, there is strong reason to fear that it is propagated. In April 1875, there were two lepers prisoners in the jail, who were full brothers, and declared that their parents were free from leprosy. There is no evidence of contagion among those lepers whose history has been inquired into by the Civil Surgeon. Small-pox is met with, but is far less frequent and less severe than in most Bengal Districts.

EPIDEMICS.—The earliest information that I have been able to obtain regarding epidemics is derived from the medical records of the jail at Purniah town. Since 1863 these outbreaks have been carefully reported on ; and the period since that year may be taken as fairly exemplifying the ordinary proportion of years in which epidemics have prevailed. Cholera, by its suddenness and severity, is the most observable of these calamities ; but it never causes such a heavy mortality as a fever epidemic occasionally does. In March 1863 a very fatal, although not prolonged, attack of cholera appeared in the jail. On the 7th of that month 9 men were struck down, of whom nearly all died in a few hours. The number of cases went on increasing till the 14th, on which day 44 men were received into hospital. The mortality was heaviest on the 10th, with 12 deaths, and on the 13th, with 10. On the 18th the last case occurred. In the twelve days during which the epidemic lasted, no fewer than 211 out of 551 prisoners were attacked ; at the end of the month 124 were cured, 76 had died, and 11 remained under treatment. The epidemic was of a virulent type, the stage of collapse coming on very rapidly. Of the 76 that died, 23 were carried off by the disease at intervals varying from five to fourteen hours.

The Civil Surgeon, in reporting on the outbreak, says. ‘Terrible as it may now appear, this epidemic of cholera has not been so destructive as the last that happened here in May 1859. This is easily manifested by a comparison of the mortality with the strength of the jail. From the records of the office I find that, in May 1859, the strength of the prisoners was 310 ; those attacked by cholera, 109 ; deaths, 60.’ On the 10th of March 1863, as soon as it was found that the epidemic was assuming an alarming aspect, the Magistrate removed about 200 of the prisoners from the jail, and put them under canvas on the race-course. This measure having no effect in checking the spread of the epidemic, 154 healthy prisoners were marched, on the 13th of March, to Hardá *ghát*, about

four miles to the south of the Station, on the Ganges and Dárijling road, and located under a clump of trees near a running stream of water. Even this move did not stop the occurrence of cases of cholera among this picked and healthy batch of prisoners; but it seems to have been beneficial, as the number of cases and the consequent mortality greatly diminished. There were two cholera hospitals, one within the jail walls, and another in a hut in the jail garden; at first the patients in the garden did better than those in the jail, but eventually the mortality was much the same in both localities. As the Civil Surgeon observed that the prisoners laboured under great mental dejection, appearing quite indifferent to their fate, and making no effort to save themselves, all hard labour was suspended, and they were allowed the use of tobacco, and, to divert their attention, were permitted to amuse themselves with music. The epidemic had been raging for weeks in the District, especially at Kárágolá, before it showed itself in the jail, and during the whole of March committed terrible havoc in the native town of Purniah and the surrounding villages. Among a body of labourers employed by the executive engineer in making a road near the Station, the mortality from cholera was quite as great as in the jail. The Civil Surgeon attributed the outbreak to excessive variation of temperature during the month, in the early part of which the weather was very hot and oppressive by day, easterly winds prevailing, whilst at night the wind shifted to the west and was piercingly cold. The thermometer stood at 88° to 62° , showing a range of 26° . There was no rain. In 1864 there was no cholera in the jail, and there is no information with regard to the District in general. In 1865 spasmodic cholera appeared in April. The year 1866 was free from epidemic.

In the spring of 1867 an outbreak occurred, more fatal than any recorded. It began on the 27th April, and of 69 patients, up to the 15th May when it stopped, 43 died. In the report of the outbreak, it is stated that 'cholera was destroying whole villages in some parts of the District.' There was an absence of the early showers of rain. The strong westerly winds which usually blow in March and April were absent, and an easterly wind prevailed. On the 29th of April a dense fog came on, which was very unusual. The thermometer ranged widely: from 101° in the sun at 4 P.M. in the beginning of April, it rose to 126° at the same hour; and from 70° in the shade to 85° about 7 A.M. On the 5th May,

when cholera was at its height, the thermometer was 85° in the morning, and had been increasing day by day from 129° to 130° and 132° in the afternoon. Thus it would seem that sultry weather with wide ranges of heat, accompanied by an easterly wind and heavy foggy weather, predispose to cholera. On the 2d May, early in the course of the outbreak, all the under-trial prisoners, and 100 of the most weakly convicts, were selected, and sent out of the jail to an encampment about half a mile distant; and the remainder were equally distributed throughout the wards at night. This partial removal, however, had no effect in checking the spread of the epidemic; and there being rather a scanty supply of water for washing purposes in the encampment, the prisoners were again removed, on the 4th May, to Belauri *ghât*, about two miles from the Station, and encamped under a clump of mango trees, near a small river. More prisoners were brought out, and at last two-thirds of the jail population were under canvas. Even this second move did not stop the disease, and cases continued to show themselves equally both in the camp and jail. It was not until heavy rain fell, about the 11th May, that the number of patients and the mortality diminished. In 1868 there was no epidemic in the jail, and little in the District. In 1869, in which, as the alternate year, cholera was to be expected, only a single case occurred in the jail. The medical officer was forewarned of an outbreak in the District after the Kárágolá fair, and immediately took the necessary precautions of clearing out wells and tanks, and using whitewash freely. The disease in the District spread, and took a very severe form. The year 1870, according to what had become almost a law of alternate years, was free from epidemic disease.

Cholera broke out again in 1871, but was confined in its greatest severity to the south and south-east of the District. The great scourge of the year was an epidemic fever, of a bilious remittent type, from which the whole population, native and European, suffered, and which was attended amongst the former by a heavy mortality. The origin of both diseases was supposed to be the malarious condition of the atmosphere, arising from the vast collection of decaying vegetation left behind by the great flood of that year. Both diseases commenced in October, soon after the cessation of the rains.

The years (alternate years, it will be observed) 1872 and 1874 were free from epidemics, and up to the time of writing (March

1876), no epidemic has appeared. In 1873, the year opened with an epidemic of measles, a comparatively fatal disease amongst natives, whom it attacks generally at a later age than is the case with Europeans. Cholera also was prevalent in the south of the District in February after the Kárágólá fair, where it seems to have originated. The *Muharram*, which happened to be celebrated at about the same time, also assisted to extend the disease. The year 1875 was as unhealthy as 1871 had been, and cholera and fever were equally prevalent, although the latter was a year of excessive rain fall, and 1875 was a period almost of drought. The number of reported deaths from cholera in 1875 was 2480, as against 148 in 1874. The mortality caused by fever was reported at 16,302 and 6784 in these two years respectively. The cholera outbreak was in 1875, as in all previous years except 1871, attributed to want of sanitation, and perhaps contagion at the Kárágólá fair.

VITAL STATISTICS.—For some years past registration of vital statistics has been conducted throughout Bengal, District by District; but the figures thus obtained are not of sufficient accuracy to deserve quotation in this place. However, since January 1873, while the general registration by Districts is not discontinued, a new system has been introduced, by which less untrustworthy statistics are now collected in certain selected areas. For Purniah District two rural areas have been taken, one in the Krishnaganj and the other in the Aráriyá Subdivision, with a total population of 19,744 souls. The selected urban area is co-extensive with Purniah town, and has a population of 16,057. During the year 1873 the number of deaths registered in the rural area was 523, showing an annual death-rate of 26·48 per thousand, against an average of 20·04 for all the rural areas in Bengal. In the same year 548 deaths were registered in the urban area, or 34·12 per thousand of population, against 29·52 in urban areas generally. For 1874 the rural area shows a death-rate of 12·76, against an average throughout Bengal of 21·20; and a birth-rate of 11·04, against an average of 35·03. The death-rate in Purniah town was 22·11, against 28·51; and the birth-rate was 11·30 against 39·60. It is evident from these figures that the registration of births is still extremely defective. The death-rates support the statement expressed above, that 1873 was a less healthy year than 1874; but they corroborate the common opinion that the general unhealthiness of Purniah District is excessive.

CATTLE DISEASE.—The following notice of the diseases to which cattle are liable in Purniah District has been supplied to me by the Civil Surgeon, and is derived from inquiries made by the subordinate native doctors :—*Arháyá*, as its name implies, is a rheumatism lasting for two and a half days. No treatment is considered necessary, as it passes off so soon. *Ghoma* is evidenced by a flow of mucus from the nose, attended sometimes with constipation and retention of urine. At other times symptoms the reverse of the latter are observed, the flow of mucus from the nose being the only characteristic. It is a fatal disease, and no effective treatment is known. *Gutí* is a disease in which the body is covered with eruptions, as in small-pox; curds, turmeric, and *dúb* grass, mixed together, are given. *Cherra* is a form of dysentery, attended by profuse watery motions. A little *dhuturá* fruit pounded up in water is given internally; also a little of a thorny plant called *sogí*. In *sardí*, or catarrh, the eyes become red and inflamed. Mustard oil is administered internally, and sometimes the juice of the *dhalfí* or *goma* is mixed up with the mustard oil. *Chaumasiyá* or *chapchapiya* is foot-and-mouth disease. It consists of an ulceration of the mucus membrane of mouth and tongue, and of sores on the feet; ginger juice or borax and honey are applied to the mouth, and the animal is made to stand in water. *Maina* is a disease common in August and September, supposed to originate from the animal eating some kind of poisonous grass which causes 'staggers' and intoxication. Obstinate constipation is treated with old and dry *dhundal* leaves or *jíra*, charred and pulverized. For retention of urine, *gerú matí* or yellow ochre is mixed with *kánjí* or rice or wheat water, and given internally. In cases of *pet kamri* or colic, salt and *ajwáin* (*Ptychotis ajowan*) is given internally.

INDIGENOUS DRUGS.—The following are the principal vegetable and other drugs found in Purniah. The scientific names have been obtained from the Superintendent of the Botanical Gardens, Calcutta :—(1) *Alkushí* (*Mucuna pruriens*), taken internally as a vermifuge; (2) *amahulá* (*Curcuma zedoaria*), the root used as a carminative, and to promote digestion; (3) *amli* (*Tamarindus Indica*), a laxative; (4) *amrul* (*Oxalis corniculata*), a cooling medicine; (5) *anisun* (*Pimpinella anisum*), used as a carminative and to promote digestion; (6) *arúsa* (*Adhatoda vasica*), common everywhere; a root used in decoction for colds and fevers. (7) *Ajwáin* (*Ptychotis ajowan*), the seeds used as a carminative and also

externally; (8) *aphin* (*Papaver somniferum*), opium, used by the native practitioners as an astringent and narcotic. Poppy seeds cooked in milk as a nourishing article of diet used by invalids; the oil is used as an external application to soothe pain. (9) *Amaltds* (*Cassia fistula*), the pulp of the pods much used as a laxative; (10) *anula* (*Phyllanthus emblica*), the dried fruit used as an astringent; the ripe fruit eaten plentifully as a cure for scurvy. (11) *Aphtemun* (*Cuscuta reflexa*), used externally as a discutient, and considered a charm; (12) *ák* (*Calotropis gigantea*), the bark of the root is similar to ipecacuanha; it is an excellent remedy in leprosy. (13) *Arsak* (*Coccinea Indica*), the scarlet spider, used as an external application in herpes circinatus; (14) *bánslochan* (*Bambusa arundinacea*), used as an aphrodisiac, (15) *bhuktádn* (*Semecarpus anacardium*), fruit eaten when green. The juice of the nut is very acid, and is used as an escharotic; it is much more painful than cantharides; given internally in syphilis. (16) *Bádranj-boyá* (*Melissa repens*), found in the north of the District, and used as a carminative and a scent; (17) *bandál* (*Vitis carnea*), the seeds and roots used in embrocation; (18) *baridrá* (*Sida rhomboidea*), highly mucilaginous, used in dysentery, (19) *barun* (*Cratæva religiosa*), fruit and bark used in embrocations in rheumatism; (20) *ber* (*Zizyphus jujuba*), the seed used as astringent in diarrhoea; (21) *chuk-ká-bij* (*Rumex vesicarius*), seed of the bladder sorrel, cooling and astringent; (22) *lál chitra* (*Plumbago rosea*), vesicatory and stimulant; (23) *safed chitra* (*Plumbago zeylanica*), vesicatory and stimulant, (24) *charas* (*Cannabis sativa*), a resinous exudation, also artificially prepared, a narcotic stimulant and aphrodisiac. (25) *Dhaníyá* (*Coriandrum sativum*), used as a condiment and carminative, (26) *dhuturd* (*Datura stramonium*), when smoked is excellent in asthma, (27) *dudiyá* (*Euphorbia thymifolia*), used as stimulant and laxative; (28) *eliva* (*Aloe perfoliata* and *A. erecta*), aloes of a coarse kind used as a purgative; (29) *gokhru* (*Tribulus terrestris*), dried seeds and capsules, highly mucilaginous, (30) *guma* (*Leonurus tataricus*), the root, leaves, and juice bitter, and used as a febrifuge; (31) *gurkha-mundi* (*Sphæranthus mollis*), used as an aphrodisiac; (32) *gul-i-bubuná* (*Anthemis nobilis*), found on the northern frontier; used in fevers, and as a purgative. (33) *Hálim* (*Lepidium sativum*), common cress-seed, used as a stimulant and carminative; (34) *jamálgutá* (*Croton tiglium*), the seeds, made into pills with ginger and *kat-karanja* seeds, are a violent purgative; (35)

kuchild (*Strychnos nux-vomica*), chiefly used as an aphrodisiac ; (36) *kalfi* (*Portulaca oleracea*), seed used as an astringent in cooling drinks ; (37) *kesru* or *harsingar* (*Nyctanthes arbor-tristis*), given internally in dysmenorrhœa ; (38) *kat-karanjit* (*Cæsalpinia bonducella*), used as a febrifuge and tonic ; (39) *kalmi sora*, nitrate of potash ; given internally, as being cooling, in gonorrhœa and fevers. (40) *Kdk-naj* (*Physalis flexuosa*), the seed of the flexible winter cherry, used as a diuretic and hypnotic ; (41) *kâlt-dând* (*Pharbitis nil*), the black seed is used half-roasted as a purgative ; (42) *kamranga* (*Averrhoa carambola*), the acid, dried fruit given in fevers ; (43) *kanghi* (*Sida graveolens*), the root used as a diaphoretic ; (44) *kachndr* (*Bauhinia variegata*), the bark is used as a tonic in fevers ; (45) *mâina-lakri* (*Tetranthera Roxburghii*), applied to wounds and used as an aphrodisiac ; (46) *muraiti-ka-jur* (*Glycyrrhiza glabra*), used as a demulcent ; (47) *mansd-sij* (*Euphorbia nereifolia*), the root, mixed with stimulants, is given to cure snake-bites ; (48) *mâko* (*Solanum nigrum* and *S. rubrum*), the dried berries of both plants are eaten ; the leaves are given in colics ; the leaves and roots are used also for fomentations. (49) *Methi* (*Trigonella fœnum-græcum*), the seed is very much used in medicine as a stimulant and carminative ; (50) *mâju-phal* (*Quercus infectoria*), gall nuts ; much used externally ; an astringent. (51) *Mulikhâr* (*Raphanus sativus*), used in indigestion ; (52) *muchias* (*Bombax heptaphyllum*), the gum of the *simul* tree, given to children as a laxative ; (53) *mahâbâri* (*Zingiber zerumbet*), used as a stimulant and tonic ; (54) *makal* (*Trichosanthes palmata*), applied externally as a discutient ; (55) *chaul mugrd* (*Gynocardia odorata*), the seeds used, rubbed up, to apply to the itch ; given internally they are emetic and poisonous. (56) *Mahud* (*Bassia latifolia*), the bark used in decoction as an astringent and tonic ; (57) *misi* (white and black), the white is pounded, double refracting spar, the black is sulphate of iron, and is astringent ; (58) *ndg keswar* (*Mesua ferrea*), the dried pistils are used like saffron in scents, and the berries in fevers ; (59) *nagar mutha* (*Cyperus juncifolius*), the roots used in scents, also as a diuretic and sudorific ; (60) *nîl-ka-phul* (*Indigofera tinctoria*), a decoction from the flowers is administered internally in disease of the liver and bowels ; (61) *nîl pattâ* (*Indigofera tinctoria*), the leaves are applied to cure bad ulcers, especially in horses ; (62) *nagdowna* (*Artemisia Indica*), leaves used in decoction as tonics ; (63) *nâsbo* (*Ocimum*

basilicum), the dried leaves are used as sternutatory ; (64) *ndspil* (*Punica granatum*), the capsule used as an astringent ; (65) *nirgundi* (*Vitex negundo*), the leaves aromatic and used in decoctions for fevers ; (66) *nim* (*Azadirachta Indica*), the bark intensely bitter and used in fevers ; (67) *nilufar* (*Nymphaea stellata*), the dried flowers used in decoctions as a sudorific ; (68) *palās* (*Butea frondosa*), the dried flowers used in dysmenorrhœa ; (69) *pīpla mou* (*Piper longum*), the root of the long pepper ; stimulating. (70) *Papita* (*Strychnos sancti Ignatii*), St. Ignatius' bean ; the seed used as a narcotic ; stimulating and poisonous. (71) *Phulkārī*, super-sulphate of alumina and potash alum ; used internally and externally. (72) *Pāniyala* (*Flacourtia ramontchi*), the small leaves and shoots resemble rhubarb in flavour, and are used as gentle astringents, (73) *phalsa* (*Grewia Asiatica*), the fruit cooling, the bark astringent, (74) *pīl pāpra* (*Butea frondosa*), the large flat seeds used as an anthelmintic and deobstruent ; (75) *pharrad* (*Erythrina Indica*), the bark is used as a stimulant and tonic, and is very bitter ; (76) *rāi* (*Sinapis nigra* and *S. dichotoma*), several kinds of mustard-seed are much used, both internally and externally ; (77) *rendhī* (*Ricinus communis*), castor-oil, used as a common purgative ; (78) *rengnī* (*Solanum xanthocarpum*), the root given in decoction to cure fevers ; (79) *resha kutmī* (*Sida mauritiana*), the root refrigerant and mucilaginous ; (81) *sonth* (*Zingiber officinale*), dried ginger ; extensively used both internally and externally, and in food ; (82) *sehorā* (*Trophis aspera*), the bark used as a tonic, and supposed to charm away snakes ; (83) *samandar phal* (*Barringtonia acutangula*), the fruit intoxicating, the root used as an aperient and febrifuge ; (84) *sūnf* (*Pimpinella anisum*), the root used as a carminative and deobstruent ; (85) *soyā* (*Anethum sowa*), the seed used as a carminative and digestive ; (86) *sirkā*, vinegar made from the juice of the *Borassus flabelliformis* ; refrigerant ; (87) *sahat*, honey ; much used in medicines ; (88) *sarhanchī* (*Alternanthera sessilis*), the root stimulant ; also applied to boils and abscesses ; (89) *śāl-kānta* (*Argemone Mexicana*), the fresh juice used to stimulate ulcers ; (90) *sabzī* (*Ocimum sanctum*) ; demulcent and refrigerant ; (91) *sād* (*Cyperus rotundus*), the root used a tonic and as a scent ; (92) *siris* (*Acacia lebbek*), the seed used as an astringent in diarrhœa ; (93) *sukh* (*Embllica phyllanthes*), used as an astringent, and as a condiment ; (94) *sarhatta* (*Solanum melongena*), the fruit given as a febrifuge and tonic ; (95) *tal makhāna* (*Asteracantha longifolia*), the seeds

mucilaginous, tonic, and diuretic ; (96) *tejpát*, a species of *Laurus* ; the leaves used as stimulant aromatics ; (97) *tukham gadíná* (*Allium sativum*), a diuretic ; (98) *tukhm-kálpha* (*Portulaca oleracea*), common purslain ; the seed used as a demulcent and diuretic ; (99) *tálmúll* (*Monochoria monostachya*), the root used as an aphrodisiac and restorative ; (100) *tháikal* (*Xanthochymus pictorius*), a kind of gamboge used as a purgative ; (101) *samsam* (*Sesamum orientale*), the seed used as a demulcent ; (102) *tisí* (*Linum usitatissimum*), the seed used as a demulcent ; (103) *ushuk* (*Dorema ammoniacum*), gum ammonia, used in coughs, and applied externally ; (104) *utingan* (*Laportea crenulata*), the seed, like coriander, is used in the same way ; this is the seed of one of the large acrid nettles very common in Nepál, and is an aromatic stimulant.

A CHARITABLE DISPENSARY, the only one in the District, was established at Purniah town in 1847, and is under the charge of a native doctor. After several changes it is now located in the Civil Station, and is within easy access of the populous native suburb of Madhubaní. The building itself is described as composed of matting and grass, raised on a masonry foundation three feet high, with verandahs. There is a separate ward for females. The attendance of patients is fairly large, amounting in 1872 to 115 in-door and 2070 out-door. In 1873 the former number had fallen to 100, while the latter had increased to 2764. A marked decrease in the number of fever cases treated was attributed to the general want of rain. In 1873 there were 15 major and 59 minor surgical operations performed. Of the in-door patients, 69 left the dispensary cured, 2 relieved, and 20 died ; in 6 cases the result was unknown. The daily average attendance of in-door patients was 5·48, and of out-door patients, 31·63. Of the former, 65 were Hindus, 31 Muhammadans, 1 European, 1 Eurasian, and 2 of other classes not separately specified ; and of the latter, 1662 were Hindus, 865 Muhammadans, 23 Eurasians, and 214 of other classes. The total expenditure in 1873 was £265, 14s. od. ; of which Government contributed, on account of salaries, medicines, and other charges, £90, 8s. od. The total income, including the Government grant, donations, local subscriptions, and other sources of revenue, was £196, 2s. od. The cash balance in hand on the 1st January 1874 was £105, 11s. 6d., besides which there was £600 invested, yielding an annual return of £30. The native subscriptions amounted in 1873 to £14, 3s. od., as against £42, 18s. od. subscribed by Europeans.

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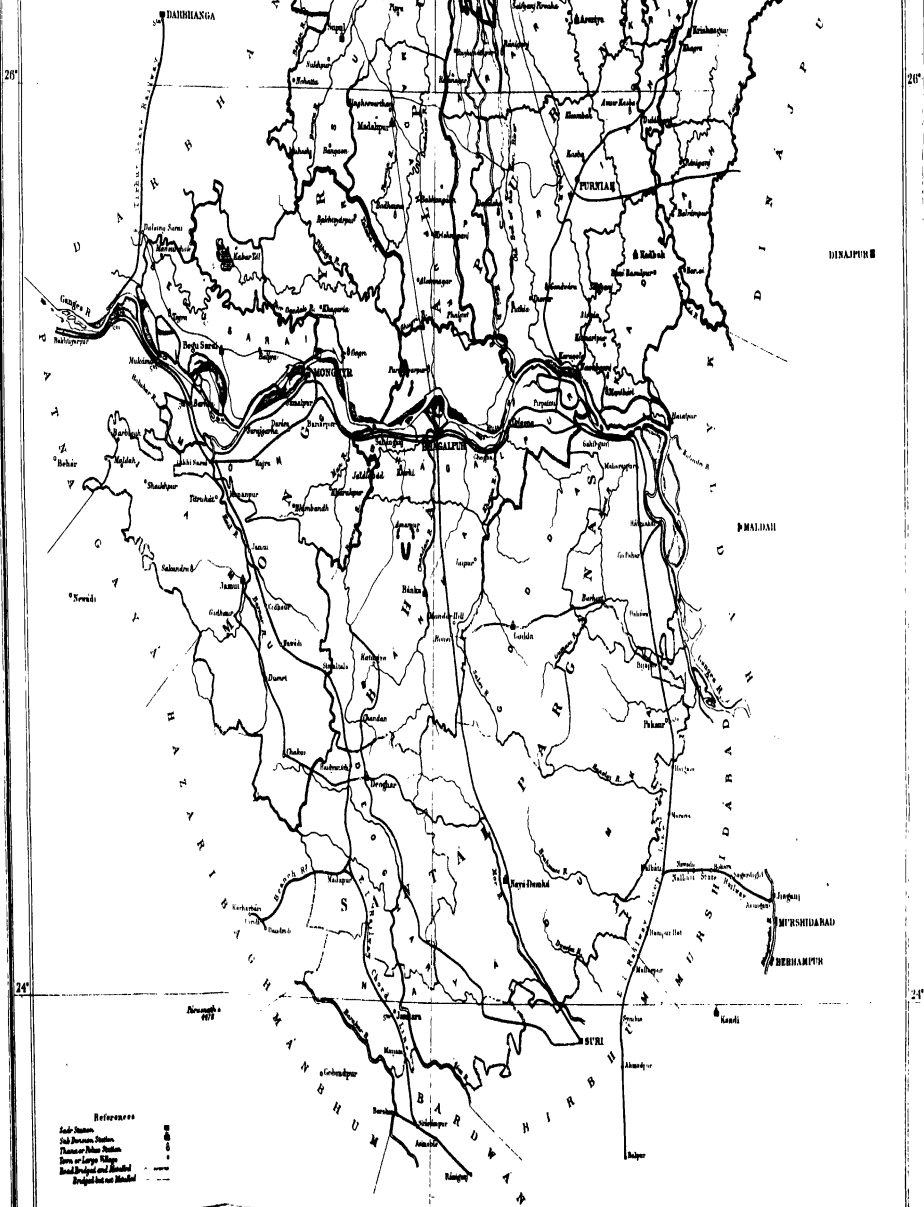
THE BHÁGALPUR DIVISION

Comprising the Districts of
**MOUGHYR, BHÁGALPUR, PURNIAH,
AND SANTÁL-PARGANAS,**

UNDER THE JURISDICTION OF THE LIEUT. GOV.^r

OF
BENGAL

Scale 18 Miles = 1 Inch



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